EMBROIDERY

A NEW SERIAL CONTAINING ARTICLES UPON STITCHES,
METHODS OF WORK, DESIGN, AND OTHER SUBJECTS
CONNECTED WITH THE STUDY OF FINE NEEDLEWORK,
WITH COLOURED PLATES AND OTHER ILLUSTRATIONS

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EMBROIDERY

PORTRAIT OF A LADY IN AN EMBROIDERED DRESS. XVITH CENTURY.

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EMBROIDERY

A COLLECTION OF ARTICLES ON SUBJECTS CONNECTED WITH THE STUDY OF FINE NEEDLEWORK, INCLUDING STITCHES, MATERIALS, METHODS OF WORK, AND DESIGNING, AND HISTORY, WITH NUMEROUS ILLUSTRATIONS AND COLOURED PLATES OF MODERN WORK.
EDITED BY MRS. ARCHIBALD H. CHRISTIE

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INTRODUCTION

THE many possibilities of decorating fabrics by the simple means of needle and thread have always exercised an irresistible attraction. The art of Embroidery is almost prehistoric; from the earliest times until the present day there has never been an epoch when it has not been more or less in vogue. Whether it will ever again attain to such a marvellous height of perfection as it did in the thirteenth century is a difficult question to decide, but one to which we should not like to give a negative answer. In the early part of the last century the art was perhaps less alive than at any other period of its history, but since then there has been an evident movement in the direction of its revival, and there is every reason to hope that this movement will prove persistent.

Our present object is to interest people of to-day in Embroidery, and to encourage a good type of work. It is common knowledge that England has in the past been especially famous for Embroidery. In spite of the fact that other countries also excelled in it, *Opus Anglicanum*, as it was named in the Middle Ages, was much sought after,

and precious examples of this famous English work still remain stored up in museums and sacristies throughout Europe. For example, in France the Cathedral Church of St. Bertrand de Comminges, a small village at the foot of the Pyrenees, preserves in its sacristy two magnificent copes of English work. In Spain there is the Daroca Cope in the museum at Madrid, and others at Toledo and Vich. In Italy there is an especially rich store, Bologna, Pienza, Ascoli-Piceno, Rome, and Anagni, all possessing wonderful copes most probably of English origin.

An examination of any of these vestments will afford sufficient evidence of the grandeur of the work done in past centuries, but the skill and labour involved in embroidering them is not so generally realised. Ten years of continuous work would be rather an under-estimate than an over-estimate of the time required to carry out the Cope of the Passion at St. Bertrand de Comminges. It contains over a hundred figures, arrayed in beautiful coloured draperies, sixty quadrupeds, and about thirty birds of brilliant plumage, no two of which are alike. The figures and

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birds are surrounded with interlacing palm branches and other foliage. At the junctions of the branches the quadrupeds are placed in crouching attitudes. The background is a work of art in itself. It is entirely couched over with fine gold thread, in a peculiar stitch which gives somewhat the effect of a rich brocade. The pattern, which it exhibits simply by means of a change of direction in the working thread, is a geometrical diaper, composed of small barbed quatrefoils touching each other, inside each of which is an heraldic eagle, lion, or horse. Every detail and line of the whole work exhibits the most consummate draughtsmanship both of pen and needle. This description may give some idea of the kind of work done during the greatest period of the art of Embroidery. The high-water mark has never again been reached, but there have been other periods remarkable for different kinds of needlework.

Embroidery is a wonderful art, capable of high and varied achievements, but also capable of giving pleasure by quite simple work. To appreciate fully its varied scope, it is necessary to become acquainted with work of all nationalities and of all periods. A large part of the work executed in the past has in course of time disappeared, but how universal Embroidery was once in church and palace we can see in the descriptions of it which abound in the inventories of cathedrals and the wardrobe accounts of royal persons. What a picture of fine work is conjured up by the following extracts, taken from the Inventory of Christchurch, Canterbury,* drawn up in the year 1563—

“Item, a cope of clothe of goldewt pomegarnettes and roses with orpheras embrodered wt pearle, in the L. Archebusshoppe his kepinge.

Item, a cope of grene silke wt roebuckles and orpheras embrodered with archaungells.

Item, a curteyne of whyte sarcenet with stories.

Item, a cope of sattene wt ymages and braunches

with vine trees and orpheras embrodered wt nedelworke.

Item, a cope wt horses and trees embrodered.

Item, two copes with pheasauntes and the orpheras embrodered.

Item, a cope of velvet embrodered wt gryffons and orpheras of nedelworke.

Item, an albe of grene damaske embrodered with beastes of gold their hornes licke a sawe.”

Such descriptions as these, taken more or less at random from amongst hundreds of others, show how alive with interest, how full of fancy and imagination, art then was. The spelling even seems to share the romance of the time, and adds a glamour to both the Archebusshoppe and his nedelworkes!

The literal meaning of the word *fancy work* rightly describes the kind of work we have been dealing with, but the term, if it once had that meaning, has become a misnomer. The reason for the decline in the fine art of needlework is not any lack of good materials, colours, or implements to work with, for these are of wider range and of as good quality as ever they were. The type of work which is attempted is often wrong, there is too much striving after easily won effect, and too much attempted realism. Embroidery, to be attractive, should show that the worker has taken an interest in planning it and carrying it out, for wise expenditure of time always adds to its value. Designing is not so much a lesson to be learned, like the dates of the Kings of England, as an inherent capacity needing development and training, but which it is infinitely better not to train at all than to train wrongly.

Let us not forget that the main object of all Embroidery is to give pleasure in some way, to charm the eye or to delight the mind, and that this is the principal reason for its existence. It is the pleasant task of the embroideress to deal with nothing but what is of beauty and interest; in taking the monotony out of plain fabrics, Embroidery

* Inventory of Christchurch, Canterbury, by J. Wickham Legg and W. H. St. John Hope.

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takes its place amongst the great arts which do the same for the monotony of life. To fulfil this object and to please should not be a difficult matter, since the materials and methods employed offer such excellent opportunities for refined and sympathetic drawing, and for the arrangement and display of fine colour.

The plan of this work, which will appear in successive parts, is as follows. There will be practical discussion of stitches, methods of work, designing and draughtsmanship. From time to time there will be articles upon subjects of general interest connected with Embroidery, its history, materials, etc. There will be illustrations of fine embroideries, such as are to be found in our national museums, with notes explaining the traditional methods of treating all kinds of subjects and details. These notes may be of use to those who cannot easily obtain access to the stores of art collected in such places.

Designing will be discussed from the point of view of giving practical help to those who wish to plan out their own designs. We cannot too strongly urge the embroideress to make from the commencement an effort to design, as well as to execute, her work. The interest which naturally arises from watching the development of an original idea, no matter how simple it may be, is so much greater than that of copying another's, that the attempt once made will almost certainly be continued. It is, however, necessary to be able to draw a little and to know some or

the rudiments of design, in order to be able to put down even a simple composition on paper. For those who have not these accomplishments the only alternative is to procure prepared designs. In each number there will be several coloured reproductions of designs for embroidery, taken from actually worked examples, for the reader, who is not a designer, to use. Each coloured plate will be accompanied by a detailed description of the method in which it has been worked, and no stitch will be employed that has not previously been explained in one of the articles upon stitches. It should therefore be a perfectly straightforward matter to work the designs from the plates.

In one way or other our aim must be to produce interesting work of a high standard of excellence, and thus help to keep alive the tradition of our country's pre-eminence in this once famous art. It is not necessary that all should engage upon works of such magnitude as Syon Copes or Bayeaux tapestries. The smallest and most humble effort can show evidence of thought and care having been bestowed upon it. Work done in the right way will repay by giving real pleasure in its execution, even if it brings no other reward, for we can perhaps hardly hope to aspire to the honour bestowed on a certain Catherine Sloper, who was buried in the cloisters of Westminster Abbey in 1620, with this simple inscription upon her gravestone: "Exquisite at her needle."

Grace Cope
G. C.

PLATE I. A LETTER-CASE WITH DESIGN OF A FLOWERING TREE

THE embroidered satchel, illustrated in Plate I, can be used as a wall pocket, or, folded and fastened, as a case for letters, or for any like use. It is not a new idea to treat articles of this kind as subjects for embroidery; very pretty *semainiers*, probably of French origin, worked on fine canvas in cross or tent stitch, may be seen in museums. The reproduction is slightly smaller than the original, which measures about seven inches by eleven. The ground material is a fairly coarse white linen, upon which the pattern is worked in brightly coloured "Mallard" floss silk. The edge is finished off with a binding of gold braid, upon which several lines of ornamental stitching are placed. From a technical point of view this is a particularly straightforward piece of work, owing to the fact that only one stitch is employed throughout the design. This stitch is simple to work and economical, since the greater part of the silk is upon the surface.

The design is symmetrical, and takes the form of a conventional fruit tree trained against a wall. There is a main central stem, with branches springing out on either side, and distributing themselves evenly over the space to be decorated. Here we have chosen to grow several kinds of flowers upon one stem, a licence quite allowable in embroidery gardens, for it permits the play of fancy, and the variety thus produced is a distinct advantage. It is difficult to define what liberties may or may not be taken in this direction, but good taste almost intuitively settles the question. For instance, no one would ever think of making a stem grow thicker towards the apex, as it would

be too great a violation of natural law, and, above all, would not be pretty. To graft different flowers upon the same tree is quite a different matter, and adds variety to a design which otherwise would be lacking in interest. Another point that may be noted, is that it is necessary, in transforming a garden tree into an embroidery tree, to alter the proportions of the different elements. For instance, the flowers and leaves are very large when compared with the stem. It is evident, however, that this is a necessity, for it would manifestly be impossible to represent in needlework the minute detail of a photograph of a tree. The lettering is placed in the centre, not for the sake of information, but to give contrast and thus avoid too much sameness throughout the design. One of the advantages of hand work, as opposed to machine work, is that change, which is frequently desirable, is quite easy to arrange. In machine embroidery, which nowadays becomes quite a dangerous competitor, at least to second-rate hand work, variety is not quite so easily produced, nor indeed in woven fabrics. We do not mean, however, to say that variety is always good, for there may be something very fine in monotony and repetition.

The stitch employed throughout the design is double back stitch, for the explanation of which see fig. 3. In this stitch the thread is carried across from side to side of the space to be covered, the needle picking up the material upon the edges alternately. It is very adaptable, easily turning a corner, contracting or expanding in width as may be necessary. To get the effect required in this design it is necessary to take small

A LETTER CASE.
(For particulars see page 30.)

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stitches, closely packed together, which is contrived by taking up a very small piece of material with the needle each time. That prevents the edge looking broken and undecided. Another point to be careful about is to well cover the traced line every time the needle picks up the material, for with this stitch the undertracing is more liable to be exposed than with some others.

The colouring of the work is very well suggested by the reproduction. The glossiness of the silk and the brightness of the gold cannot help being lost in translation, but otherwise the colour is very truly rendered. It should be noted that the ground fabric of the original is a pure white, which it is not possible to reproduce; it would be difficult to substitute a better ground, as all colours gain in value upon white.

The stem is worked entirely in one shade, a cool dark brown. At the base, where the width is greater, the stitch is worked in exactly the same way as in the narrower part, but it is taken to and fro across a wider area. The leaves are worked in two shades of bright green. Both shades are used upon almost every leaf, one side being of the lighter colour and the other of the darker one, so the stitch has to be worked in two separate lines, each tapering towards the point. A few of the smallest leaves are worked in only one shade, and therefore with a single line of stitching, exactly as shown on the leaf in fig. 3.

The yellow flowers are worked in two shades of bright yellow, and each has, in some part or another, a touch of black to emphasise an outline or some other detail. The circular flowers in the centre panel are worked petal by petal from the centre outwards; half-way out the thread is changed to the deeper colour. The mode of working the others is fairly evident in the reproduction. The red flowers are worked sometimes in only one shade of deep red, and sometimes in two, the centre being either black or yellow. The stitch is worked from the

centre outwards, as a rule, with continual adaptation to the shape to be filled. The deeper shade of red is used for the worms, with which the birds are busy. The blue flowers in the two upper panels are worked with all the three shades of blue in use. In the lowest panel, the blue flower, self coloured, is worked in the deepest shade of blue. The most satisfactory way of working this flower is to run a line of stitching round the circumference, breaking the line of stitching for each separate petal, and then to fill in the inner part from the centre outwards. The letters are carried out in the deepest shade of blue, the stitch worked just as in any other part of the design, and adapted to the shade to be filled. Particular care should be taken here not to lose the character of the lettering. The three birds, of which the uppermost appears to be the proverbial early bird, are worked in the three shades of blue, the darkest shade at the top and the lightest undermost; the feet are in black, the eyes in black with a white line round, and the beaks in the deepest shade of yellow.

When the embroidery is completed, each separate piece, with clean damp blotting-paper underneath, should be pinned out quite flat upon a board. The work should be left in this position for some hours with a weight on the top, which is a mild form of ironing that is very often desirable as a finish, even if quite unpuckered. This done, there remains only the making up. The back piece, and each of the two front pieces, must have a lining tacked to it. The two small flaps will probably be lined with white silk or fine linen, but what is placed behind the back piece will depend upon the use to which the finished object will be put. If it is to be used as a folded letter-case, it is important to place upon the back some material suitable for an outside covering, such as a figured or plain silk. If it is to be used as a wall-pocket, it should be backed with a fairly stiff material, in order to make the whole more rigid. When the

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linings are all tacked into place, and the pockets also temporarily fixed in position, the next thing is the placing of the binding all round the edge. Gold braid may be used for binding the edges, but it is not at all essential; a ribbon would be easier to manipulate and would do equally well. The edging, whatever it may be, must first be doubled in half and flattened, and then tacked on all round the outside of the case just as in any other kind of binding. The ornamental lines of stitching are next worked all round, to fix the binding firmly in position. Two lines of chain stitching are taken all round, the inner one of the deepest blue colour, the outer one of the darker shade of green. Then a line of buttonhole stitching in black is worked all round the outside, taking alternately two long and two short stitches. In and out of this, all the way round, two lines of dark blue silk, each composed of double thread, are darned in such a way as to form a kind of chequer

pattern. The binding across the top of the pockets has a single line of chain stitching along it, in the deepest shade of blue. This ornamental edging could easily be simplified if the worker wished.

The Mallard floss which is used for the working is a rather coarse, loosely twisted silk. It is very suitable to employ for this stitch, but if a finer thread is desired, Twisted embroidery, "Filo-Floss," or Filoselle could be substituted. The two last-named silks would have to be used with two or three strands threaded in the needle, otherwise the ground would not be completely covered.

The silks used in carrying out this design are the following :

Blues	. shades	Nos. 20f, 20d, 20b,	about 2 skeins of each.
Crimsons	„	Nos. 41a, 44	. „ 1 skein of each.
Yellows.	„	Nos. 186d, 186h	. „ 1 skein of each.
Greens	. „	Nos. 85, 86	. „ 1 skein of each.
Drab	. shade	No. 30f	. „ 2 skeins.
Black	. „	No. 82	. part of 1 skein.
White	. „	No. 70	. 1 strand only.

G. C.

STITCHES—I

SATIN STITCH—CHAIN STITCH—DOUBLE BACK STITCH—FRENCH KNOT—STEM STITCH—BUTTONHOLE STITCH

THE subject of stitches is always particularly interesting to workers, and without doubt it is useful to have at service all the various methods of expression that have gradually been accumulated. Stitches are the means of expression in embroidery, and the variety among them allows plenty of choice in the selection of those most suitable for each special purpose. Some are intrinsically beautiful, others serve rather to show to advantage the beauty of the thread; for different kinds of thread different stitches are the best exponents. In the great variety that exists there lies a danger, namely the possibility of using too many kinds in the same piece of

work, and it is frequently wise to make use of only one, or at most very few, for an entire subject. Whilst it is quite possible for one to execute many stitches perfectly and yet be a second-rate embroideress, on the other hand it is not necessary to know more than three or four in order to be able to execute the finest and most intelligent work. The best English embroidery that has ever been wrought was carried out in two, or at most, three stitches. These were: for the gold thread, a peculiar form of couching; for the silk threads, split stitch, which is similar in appearance to chain stitch; and, as an occasional addition, satin stitch.

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When choosing a stitch or method it is necessary to consider what characteristics it should possess. Durability is one of the best, as work that is worth the doing is worth preservation. Suitability for the use to which the object will be put is another important point, for what is entirely right for one purpose may be quite unsuitable for another; for some uses a stitch may be allowed to be long, and comparatively loose, but for many others it must be short and firm. Economy may be a necessary con-

Fig. 1

sideration, and some stitches take much more thread than others in the working, because they leave as much of the thread upon the under as upon the upper surface. One of the most important points in making the choice is the kind of thread with which it is to be carried out, for the same stitch may look worthless in a fine soft thread, though quite effective in a coarse one, and *vice versa*. But knowledge on this subject can best be attained by practical experience.

B*

SATIN STITCH

Satin stitch, one of the simplest and most straightforward, is not necessarily the easiest in execution, since it requires very perfect technique in order to look well. It is done either in the hand or in the frame, but for very careful work the help of the latter is required. It is useful for showing silken thread to advantage, as the long stitches, lying flat and close together upon the ground, catch the light and reflect it prettily. Fig. 1 shows the working of the stitch in progress. It is usual to carry it obliquely across the area to be filled, but this is not obligatory. It will be noticed that there is as much silk at the back as upon the front of the material, but this must be, in order to make the work lie evenly and regularly upon the surface. When perfectly worked, the stitches should lie closely, one beside the other, in parallel lines, and special care must be taken with the line that is formed at either side by the beginning and end of the stitch, as with bad workmanship that portion may appear irregular and weak; but to reach perfect execution in this respect is a matter of care and practice.

Satin stitch is prettier when worked quite flat than when raised by a padding underneath. As a matter of fact all padded work is of doubtful taste; there is perhaps something about it which suggests over-realism. The best type of embroidery is obtained by the decoration of a flat surface by means of pattern and colour; raised work can well be left to the wood carver, sculptor, or worker in gesso, for the embroideress can get on better without it.

A good many of the ordinary stitches can be treated like those used in canvas embroidery, and be worked according to the web of the fabric, that is to say by counting the threads of the warp and woof. Satin stitch worked so makes a pretty variation. This method of working gives a peculiar effect which is often pleasing. When working in this way

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upon linen, it is necessary to choose a material with a regular mesh, otherwise the various forms would be ill drawn. The advantage of using linen for the ground, instead of canvas, is that the background need not be worked.

CHAIN STITCH

Chain stitch is one of the best known, most commonly used, and most durable of

tached stitches. It is a most useful line stitch, especially for fine curved lines, which need good drawing; even when used for a filling it is often wise to keep up this "*line*" character. This can be effected by following round the shape of the area to be filled with lines of stitching, commencing with the outline, and sometimes, in order to emphasise the line character still further, the rows of stitching can be worked in at least two contrasting shades, a method frequently employed in

Fig. 2

Fig. 3

all. Its special beauty lies in the regularity and evenness of the working, but with all this it should not look mechanical. That is one of the points in which the sewing machine cannot compete with handwork. The machine can do quicker and more regular work, get perfect technique and fair colour; but still the effect is mechanical, so let us carefully guard one of the few points in which we still have supremacy. Chain stitch can be used in many different ways, for working a solid, or semi-solid, filling, or for carrying out lines, or it can be used in de-

old work. When a form is required to be only partially filled, two or three lines of chain stitch, in contrasting colours, round the edge are quite sufficient, though sometimes, in the case of a leaf or flower, a centre vein or a mass of French knots may be added. Chain stitch can be used upon canvas to carry out a pattern, like cross stitch work, the lines of stitching being taken across from side to side either vertically or horizontally, the pattern being displayed by changing the colour of the thread. This resembles knitted work when finished; but

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the method is not so suited to the character of the stitch we are discussing as the one more usually employed. The working of the stitch is explained in fig. 2, where it is being employed upon a curved stem.

Chain stitch is much used in Indian, Chinese, Persian, and in fact in all oriental work. It is frequently employed with wonderful effect over very large pieces. A tambour frame and a kind of crochet hook are probably used in the production of such pieces, for the tambour frame is of Eastern origin, and this latter is a much more rapid method of execution than the ordinary needle.

DOUBLE BACK STITCH

Double back stitch may not be so well known as some others; it is, however, a most useful one and quickly and easily worked. It can be used in conjunction with other stitches, or employed for an entire piece of work, as, for instance, in Plate I. It can frequently be seen in Turkish and other Eastern embroideries, occasionally for the carrying out of large hangings, in which case coarse woollen thread is employed. In fig. 3 the stitch is shown in progress upon one leaf, with another, completely worked, immediately underneath. A piece of material is picked up with the needle (as shown in the diagram) first on one side, then on the other of the area to be covered, and the thread is so carried to and fro across it. The stitches should not be picked up exactly opposite each other, each succeeding one should be half its length ahead of the last one opposite. The correct working of the stitch forms a double line of back stitches on the reverse side of the material. Sometimes the stitch is worked with these back stitches upon the surface, and the crossing-over threads underneath. This is just as easily done, and forms a pretty variation to use upon muslin or similar material, for then the crossing stitches upon the back show partly through.

FRENCH KNOTS

Fig. 4 shows a French knot in process of making, and some completed ones beside it. French knots first occur on Western embroidery in the late thirteenth century and were probably derived from the East. The Chinese, whose work is very ancient and

Fig. 4

has hardly changed at all in the passage of time, make great use of knots. French knots are in frequent request for many purposes; they suggest stamens well, and so are usually employed for the centres of flowers, as in this diagram; the knots in the centre form a pleasant contrast to the working of the petals, which would usually be carried out in flat stitching. A decorative line, made by arranging a row of these knots, separated by just the space taken up by one, might be placed on the inside of a border or of a leaf carried out in outline. The making of the knot needs more explanation than the diagram affords. After bringing the thread through the material, hold it, with the

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thumb and finger of the left hand, at about the distance of an inch from the commencement, then make the point of the needle encircle the held thread twice, and return it through to the back, very close to the point where it came out. This will draw the thread through the twist that was formed upon the needle, and fix a small knot upon the surface of the material. The knot is made bigger or smaller according to the number of twists formed upon the needle. French knots, to be effective, should be well made, and they are most perfectly executed in a frame, for then both hands are free for the manipulation.

STEM STITCH

Stem stitch, known also as crewel or outline stitch, is illustrated in fig. 5. It

Fig. 5

makes a firm, fine line better than any other stitch, and is constantly employed for that purpose. Slight variations are possible in working it, which are dependent chiefly upon the quantity of material picked up each

time, and on the direction in which the needle is taken through it—that is to say, whether obliquely or straight; the more obliquely it is drawn through, the wider the line of stitching is. A particularly regular way of working stem stitch, is to pick up the material in such a way as to form a line of back stitching upon the under surface. For working a fine stem a single line of stitching would be employed, for a thicker one, several lying closely beside one another, and these lines often vary in shade or colour. Stem stitch is used in this way as a filling for other than line forms, such as leaves or flowers, numerous examples of which can be found upon seventeenth-century wool work hangings. The stitch is frequently employed as an outline to various solid fillings, when it is worked with the thread upon the right-hand side of the needle, as this makes a more regular, and less jagged, line than working with the thread on the left-hand side. It is correct to work it either way.

BUTTONHOLE STITCH

In embroidery, buttonhole stitch is applied to a great variety of uses. For such purposes as the outlining of forms, edges, fillings, or backgrounds it is constantly in request. There are several slightly varied methods of working it. The usual way is illustrated in fig. 6, where it is being employed for outlining a berry, whilst another, completed, can be seen to the right. The firm edge, caused by the looping of the stitch, makes it very well adapted to purposes of this kind. It can, if desired, be worked more openly than here shown, and small variations of many kinds can be made by different arrangements of spacing; *e.g.* three together and then an interval, or some such other simple change as would produce another result. It is better to keep the firm edge out of sight when the stitch is used as a close filling. In order to do this, each succeeding row of stitches is worked over the heading of the last row. This is a particularly attractive way to work

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a solid filling ; an example of its use thus can be seen in Plate IV upon the flowers and leaves. There it is worked in small stitches,

Fig. 6

placed close together, each being taken over the heading of the last row, and also over a laid line of silk. This laid thread is run close to the heading of the last row, and it is a good plan to add it, as it makes the work more solid in appearance and fills up

any little gap that might otherwise allow the ground to peep through. A similar and quicker way of working a filling of this kind, is to lay several strands of thread, instead of one, and then work the buttonholing more openly, but otherwise in exactly the same manner, over both heading and laid threads. An open buttonhole filling is worked in the way last described, but with the laid threads omitted. The stitches can easily be arranged by means of spacing to form such simple patterns as a net or a chequer. Backgrounds can be very prettily decorated by covering them with a network of buttonholing, treating it exactly as just described. It is not necessary when using buttonhole stitch as a filling, always to take it through the ground material, for it is often worked with the needle entering the material only at either end of the line.

A solid line of buttonhole stitching is often employed to finish off the edge of a piece of work. A simple way to make this band more interesting is to run lines of thread of a contrasting colour in and out along its length, in darning fashion. By these means pretty little patterns, not unlike those used for narrow lines of wood inlay, can be produced. For example, a chequering might be planned like the border to the letter-case in Plate I, or a simple counterchange pattern, like those frequently seen upon the borders of Persian carpets.

G. C.

PLATE II. AN OBLONG TABLE-CENTRE DECORATED WITH MICHAELMAS DAISIES

AN embroidered table-centre is illustrated in Plate II. The actual size of the original is nineteen inches long by fifteen inches wide. It is worked with "Filo-Floss" silk, on a white linen ground in several shades of pink and green, and two of dull purple.

In designing, the use of the object is the first thing to be considered, and demands certain restrictions. The position a table-centre occupies requires that it shall look well from all points of view. As there is usually a vase or similar ornament in the centre of it, a great amount of work at this

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point is unnecessary, and the interlacing knot, formed by the termination of the stems, is more in keeping than an elaborately worked flower would be. From this knot the main lines of construction formed by the stems meander over the ground, and gain value from their recurrence at regular intervals. The shorter stems of the leaves branch from these main lines.

A certain natural convention, enforced by the limitations of material, has to be observed, and care taken that the stitches, which are the means of expression, should be used to the utmost advantage and no attempt made to conceal them. These limitations must be acknowledged in embroidery as in all other crafts. Hence the more highly shaded forms of flowers and leaves, which are possible in painting, are often better not attempted in needlework, though a certain amount of shading is admissible—on the drapery of figures, for instance. In the best work the decorative principle of shading is always followed, and it is introduced mainly for the sake of variety in colour, care being taken that the whole is kept pure and brilliant and that it does not become dull, as it would if black, or brown, were used for the shadows.

The plant chosen for this design is the Michaelmas Daisy, the flowers of which grow very thickly at the top of the stems. This natural habit of the flowers gives a suggestion which is taken advantage of, and they are all kept to the outer edge, forming a natural border. The flowers are treated quite simply, many of the petals being omitted in order to avoid confusion, a kind of simplification which was invariably observed during the best periods of art. The aim of good design is to maintain the chief feature of the plant and to ignore accidents which do not possess any value. This has been done in the present subject, and the flowers as arranged form an excellent contrast to the remainder of the space, over which the stems and leaves are evenly distributed. In the living plant the leaves are small and grow closely on

the stems, but art steps in where nature is too prolific, fewer of them are used, and the leaves are enlarged, an amendment which renders them more suitable for embroidery, lessening the amount of time and labour which would be entailed if they were worked exactly as they appear in nature.

In working this table-centre five stitches are employed: satin, chain, stem, French knots, and double back stitch. The petals of the flowers are worked in double back stitch with double thread in pale shades of pink, with French knots for the centres. The buds are worked in the former stitch, in deeper shades of pink. Satin stitch is used in the calyxes of the flowers. The interlacing knot, and the stems, are done in stem stitch with double thread, whilst the leaves are worked in chain stitch, with single thread, in varying shades of green. The shades in the conventional veining run from light to dark green, beginning at the base, and the outline changes in shade to match the veining.

The corner, which is left between the outside border and the oval outline of the flowers, is filled in with an irregularly curved line, worked in stem stitch, with single thread, and taking small stitches. The border itself is made with two rows of open buttonhole stitch, in double thread, in the dark purple. Six strands of bright green are subsequently threaded through each row of buttonholing, using a large needle with the blunt end foremost. Finally, a line of stem stitch, in double thread, in the dark purple, is worked outside the outer row of buttonholing, and pink French knots are dotted along the inner margin.

When the embroidery is finished, the work, if at all puckered or creased, must be well stretched and pressed under a weight. It should then be lined with some thin soft silk of the same colour as the ground, or a pale shade of green. This design might be carried out very prettily with quite a different colour scheme, white silk forming the ground, with the petals of the flowers and buds worked in two shades of a golden

PART OF A TABLE CENTRE.

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yellow, and with a dark shade of purple for the French knots in the centres of the flowers. The stems and leaves would be in green. Another way would be to have a yellow ground, and to work all the flowers and buds in white, with the French knots in yellow. In white it would make a useful tray-cloth, but if used for this purpose the ground should be white linen and not silk. The design might be made an interesting centre for the cover of a table, with the

addition of drawn-thread work and lace, to form a rectangular shape. It could also be used simply as a mat on a sideboard, worked on linen.

The shade numbers of the "Filo-Floss" silks used in the piece reproduced in the coloured Plate are the following—viz:

Purples	Nos. 120y and 120a	. about 2 skeins of each.
Greens	Nos. 178c, 178d, 178e	. „ 1 skein of each.
Pinks	Nos. 163d, 163e, about 2 skeins of each; 163h,	3 skeins.

M. SCHOLFIELD.

DESIGNING—I. FLORAL DESIGNS

THE dancing figure of Spring in Botticelli's picture the "Primavera" is robed in an embroidered gown, the decoration of which very happily typifies not only the gaiety and freshness of that lady herself, but also a great phase of design. Strewn upon a white ground are a number of plants, bearing many coloured blossoms. Each is complete in itself and isolated from its neighbours. A certain amount of balance is preserved over the whole design by keeping the numerous units of about the same dimensions, and they are placed with due regard to order, producing that effect of monotony without which dignity can hardly exist.

The silks used by the embroideress seem naturally to suggest flowers. She may almost claim floral designs as exclusively her own property, for her brightly coloured materials give facilities for imitating blossoms and leaves with a fidelity to which workers in less delicate materials can never attain. Indeed, it is to embroidery that we naturally turn for the great examples of this type of design, the origin of which has been traced to China—the land of silk. The technical processes of the art do not demand the rigid repetition of identical elements, and so as much variety as is consistent with the exi-

gencies of pattern may be introduced. In the embroidered hangings of the Far East, twelve feet or more in height, the formal arrangement of the design is often reduced to a minimum, or is at first sight quite absent. But careful examination shows that the great trees, whose branches seem to sweep in so unrestrained a manner over the surface, in reality bear their blossoms in a remarkably orderly fashion—so much so, that were the stems, which serve to disguise this regularity, removed, we should often find the design resolve itself into a plain ground spread over with flowers of great similarity to one another and with such considerable exactness of arrangement, that something very much akin to the pattern upon the dress in Botticelli's picture would be the result.

It is a fairly simple matter to compose designs of this type, the quality of which will steadily improve with practice, experiment, criticism of the results of finished work, and comparison with fine examples. The embroideress has but to commit to memory the appearance of certain of her favourite plants, and embroider them; a process which will be greatly facilitated by carefully drawing them from nature if she is a draughtswoman, or by trying to do so if she is not, remembering the Irishman who

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did not know that he could not play the fiddle, because he had never tried! The embroideress who has learned some stitching,

Fig. 7

which is drawing with a needle, is often able to draw with a pencil better than she imagines.

Having drawn a plant, it will be necessary, perhaps, to make a second drawing, clearing it up by rearranging leaves and stems that cross each other and obscure the general growth, until a design something like that shown in fig. 7, a flower from the robe of Spring, is the result. The old botanical and gardening books with coloured plates, published by Curtis, Sowerby, and many other less famous authors in the last years of the eighteenth and the beginning of the nineteenth centuries, afford excellent models for plant drawings for embroidery, and are fairly easily procured. Several plants, which are

to be the units or elements with which the designs are to be built, should be drawn in this way, care being taken that they are of about equal size and have a certain amount of likeness to one another—although the necessity for this depends upon the use that is to be made of them. A simple exercise is to rule two series of crossing diagonal lines at regular intervals over a piece of paper, producing a number of diamond-shaped spaces, into which the plant drawings can be traced. A single plant may be used, leaving several blank spaces around it, two may be placed alternately over the whole surface, or any other similar arrangement that suggests itself may be adopted. A design of quite another type could be made by placing four flowers one in each corner of a rectangular space, pointing either towards

Fig. 8

the margin or the centre, in which a fifth flower, or group of flowers, could be arranged.

A great deal of character can be imparted to simple designs, such as these, by means of a careful choice of the plants used. There is the tender poetic design of spring flowers, the full luxuriant growth of summer plants—designs, in fact, for the round of the seasons,

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each one of which would have a distinct and interesting character of its own.

The root of the plant may sometimes be included in the design, forming a happy little decorative finish to a floral element. More frequently, however, only parts of a plant are used, instead of the whole of it.

A single blossom, or a series of alternating blossoms, may be arranged regularly over the ground, with long or short stems as the case demands; these stems can be quite plain or each bear one or more leaves, or perhaps a bud also. Several sprigs of different flowers may be

arranged in groups, as in a formal bouquet, and these groups repeated as elements over the design. In many old designs the bouquet idea was carried still further, and whole baskets of flowers were represented, usually as the central ornament of a design. An example of this is given in fig. 9.

Small twigs of foliage cut from trees can

be used in the same way as the flower sprigs. The whole surface to be decorated might be spaced off into squares, and each embroidered with a piece of oak, elm, beech, or some such foliage, spread out as in fig. 8. All sprigs should, at least in the first attempts in this design, conform to a common arrange-

ment — that is, following the example given, each should spring from the lower left-hand extremity of the square diagonally to the top right-hand corner, and bear a couple of secondary branches. Many variations are possible; should the heavy green appearance of a

design so covered with foliage not be desired, it is easy to leave the surrounding squares plain, or to occasionally substitute a piece of a flowering shrub, such as a rhododendron, azalea, or peony, the white or coloured blossoms of which would brighten up the whole.

A. H. CHRISTIE.

Fig. 9

PLATE III. A TRAY-CLOTH WITH A CONVENTIONAL BORDER IN BLUE AND GOLD

PLATE III illustrates an embroidered tray-cloth, the size of the original being eighteen by twenty-seven inches. The design forms a running pattern round the cloth and repeats on half its own size. Variety has been given to the shapes of the flowers, and the worker can vary them still further by devising other fillings; but in order to give the necessary balance, they should either all be worked in outline or, as an alternative, all with solid stitching.

Much may be learned from old work about different treatments for fillings; many of the old coverlets in the Victoria and Albert Museum are full of interest, and well repay careful study. Inspiration for work can often be gained from them, and the simple stitches used in English wool-work are well adapted to the purposes of a subject such as this.

The purpose to which the object is to be put generally decides what stuff it is to be worked upon, but the material should rarely be much in evidence. White linen is a good ground for a tray-cloth. The texture should be neither very coarse nor very fine, in order to show to best advantage the Twisted Embroidery Silk with which it is worked. A linen without starch or dress in it is always best, and, if a hem-stitched border is to be used, it is well to choose a material in which the threads draw easily. A hem-stitched border is a satisfactory way to finish off a linen cloth, and it could be used to advantage in the present case.

The colour scheme chosen is one of blue and yellow, the yellow running through the border in curved bands, and the flowers being treated entirely in two shades of blue.

The stitches used, are double back, buttonhole, chain, stem, satin, and French knots, for the explanation of which see the article on stitches.

In beginning a piece of work, instead of making a knot, the thread should be run along the material, passing back again through itself, and then carried through to the front. The description of the working of the flowers commences at the right-hand end of the top line, and continues from right to left, and down the left-hand side: the flowers are named alphabetically.

For flower A, close buttonhole stitch in pale blue has been used round the outline of the four petals, chain stitch in dark blue for the pointed calyx, and dark blue French knots for the centre.

Flower B has its outside pointed petals in double back stitch, with three inside petals in buttonhole, all in the pale blue silk; the two forked stamens are in dark blue satin stitch, and the base has the same colour and stitch.

Flower C has a pale blue stem stitch outline, with a solid dark blue centre in French knots.

Flower D has a chain stitch outline in pale blue—dark French knots in the centre, and also three detached knots in the centre of each petal.

Flower E has its seven petals worked in double back stitch in pale blue, French knots in dark blue filling the centre. The small corner flower F has pale blue outside petals in buttonhole stitch, with a central dark blue petal in double back stitch.

Flower G is outlined in pale blue stem stitch, with three French knots, in the same colour, placed close to the outside edge, and a centre of dark blue French knots.

Flower H has a chain stitch outline in pale blue, one dark French knot being placed in each petal and a solid dark base in satin stitch.

Flower I has its five petals outlined in pale blue buttonhole stitch, and dark blue French knots in the centre.

A TRAY CLOTH.

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Flower J has an outline of pale blue in double back stitch, one French knot being used in the centre of each petal, in dark blue.

Flower K has a pale blue outline in chain stitch, the same stitch being employed again in dark blue to give the pointed calyx, and French knots in dark blue in the centre. Four small detached chain stitches, in pale blue, decorate the centre of each of the four petals.

Flower L has its petals filled solidly at the ends with pale blue buttonhole stitch, and thinner stem stitch lines attach them to the satin stitch centre of dark blue. Stem stitch, French knots, and satin stitch are again used to suggest the stamens.

Flower M is outlined in stem stitch, has a solid centre in French knots, and three detached knots, in dark blue, in the alternate petals.

Flower N has its three large pointed petals in double back stitch in pale blue, with two small semi-circular petals between in dark blue buttonhole stitch, and a circular satin stitched base in dark blue.

Flower O has a chain stitch outline in pale blue, French knots in dark blue filling the centre.

Flower P, filling the corner, is worked in

buttonhole stitch, with two petals in pale, and one in dark blue.

The leaves, scrolls, and stem are all worked in outline stem stitch. A touch of brightness is given to the colour by a line of open double back stitch in yellow, filling in the thickened stem at regular intervals.

The variety of the fillings in the flowers takes away any monotony that there might otherwise be. An alternative scheme of varied, brightly coloured flowers with green leaves, worked on white linen, would look well ; or possibly a colour scheme could be devised in keeping with the china placed upon the tray. It would be quite possible to use this design for a table centre, working it upon a different ground—such as satin, silk, or fine linen. Floss silk of varied colours could be used, blue and pink alternately for the flowers and bright greens for the stems and leaves, simple stitch forming the border line instead of the hem stitching. Or again, the design might be adapted for a running border and used for the decoration of some part of a dress.

The Twisted Embroidery Silks used in carrying out the work are the following :

Dark blue	.	.	.	No. 45, about 7 skeins.
Pale blue	.	.	.	No. 42, „ 7 „
Yellow	.	.	.	No. 91b, „ 2 „

F. M. LAKE.

A SIXTEENTH-CENTURY EMBROIDERED JACKET

THE frontispiece, a reproduction from an oil painting, is a portrait of Margaret, wife of Francis Laton of Rawdon, who was born in the year 1579 and died in 1662. The beautiful embroidered coat which the lady wears, of which only a portion can be seen in the picture, is still in existence and in so excellent a state of preservation that the colour of the embroidered work is at the present time brighter even than the painted representation of it.

Both treasures are in the possession of Colonel J. Headlam, to whose kindness we are indebted for permission to examine the embroidery and also to reproduce the picture. Fig. 10 is an outline drawing of half of the front of the jacket, and fig. 11 represents a detail. These, with the help of the frontispiece, give a fair idea of the whole. The back is embroidered in the same style as the front, and it is, perhaps, more beautiful, for there the work extends over the entire

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surface, without a break such as is caused by the necessary division down the centre of the front.

The design is composed of free scrolling stems from which are thrown off flowers and leaves of many different kinds. Snails, caterpillars, butterflies, brilliantly feathered cockatoos and crested birds so curious that it is difficult to name them, occur at intervals over the decorated space. Golden tendrils frequently twist out from the stems, and finally little silver-gilt circular spangles are dotted over any portion of the ground that is left vacant. Just the right finish to the embroidery is given by the lace edging, which is made up of gold and silver thread woven together into a simple pattern.

In the sixteenth century all arts reflected the prevailing spirit of romance. The designs for embroidery were full of imagination, variety, and pretty surprises. Look at the fantastic mixture of flowers, birds, butterflies and other insects displayed upon this coat! Add to the attractiveness of the design its execution in various brightly coloured silks, leaves shading quite happily from blue through green to salmon-pink, a golden plaited stem curving in and out binding all together — we have in this example of English embroidery a beautiful and characteristic piece belonging to that interesting period.

The flowers are of all colours and of many kinds; indigo blues, yellows, reds, and pinks show off to advantage such flowers as honeysuckle, carnation rose, pansy, fritillary, and others of so fanciful a character that we can turn them into our own special favourites. There is some art shown, quite legitimately in needlework, in now and then leaving something to the imagination, and not always tying down the observer to actualities. Most of the flowers have centres of gold thread arranged in a wheel shape; these are made by first laying metal threads loosely across, arranged like the spokes of a wheel, and then darning round and round them in and

out until the required space is filled in. The larger petals of the flowers, after being finely worked in various solid fillings, are further decorated over the embroidered surface with dotted stitches in silver thread, which can be clearly distinguished in the frontispiece, though they are more noticeable there than in the actual embroidery. The prevailing colour of the leaves is green, some are blue and green, others blue, green, and yellow; at the tips sometimes pink replaces yellow. The birds and the insects are of all the colours of the rainbow, brighter even than other parts of the work; but each creature is characteristic of its kind.

The stitches employed throughout the work are fine and close. All the solid fillings can be traced to some kind of looped stitch (see figs. 6 and 12) worked similarly to needlepoint lace fillings. Stem stitch (see fig. 5) is used to vein the leaves after they are worked. The stem, for which rather coarse gold thread is employed, is worked in an ingenious interlacing stitch which, when completed, resembles a plait. In the frontispiece its character is quite distinguishable, the painter having copied it very faithfully. This stitch, commonly seen in Elizabethan work, is particularly suitable for metal thread. On this jacket, besides being used for the stems, it is also worked over the seams to both hide and decorate them. The small tendrils which break out from the main stem are worked with the same gold thread, but in chain stitch (see fig. 2). For the birds, insects, and some of the flowers a specially interesting form of filling is employed, which will be, by sight at least, familiar to any one acquainted with embroidery of this date. It is a fancy looped stitch, which, when it covers a surface, produces a close, regular network apparently formed of tightly knotted interlacing diagonal lines. A stitch like this, which makes a pattern in the working, is almost always decorative and attractive. This particular fancy filling, and

Fig. 10

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the plaited stitch mentioned above, will be described in some future article upon stitches.

In all the solid fillings in this piece of work, the needle enters the material only at the edges of the spaces that are filled. A neat device is often employed in order to prevent the necessity of taking the needle actually into the material at any point whilst working the filling. A preliminary line of either chain or stroke stitch is run round the outline of the space to be filled, and the needle, upon reaching the edge of the shape, is taken into this prepared outline instead of through the material. This method tends to make the solid filling still more flat and regular than it would otherwise be.

The fillings of the leaves are worked in buttonhole stitch, by a method somewhat like that employed for the flowers in Plate IV. A line of silk is thrown straight across the leaf from side to side, and a row of ordinary buttonhole stitches worked over it. In the succeeding rows the stitches are taken over both the laid thread and the heading of the previous row, and so do not enter the material except at the extremities of each line. The stitches are not placed close beside each other; the laid thread can be distinctly perceived between each one and the next. Fig. 12 is

Fig. 12

a diagram explaining the working of this filling. A line of chain stitch is worked first round the outline of the shape, a square in this case. Next the thread is brought through the material in the centre of the chain stitch, at the right-hand top corner. It is taken horizontally across the form, and looped into the chain stitch on the opposite side, but not necessarily into the material. It is then in position to work the first row of buttonhole stitching over the laid thread, and into the chain stitch line at the top. At the end of the line the same process is repeated. It will be noticed that only half

the chain stitch line round the edge is visible, and that it forms a neat finish to the filling; it can be, and often is, of a different colour from the other part. This method is to be recommended and it is much more rapidly executed than when the stitches are placed touching each other, as they sometimes are. When a change of colour is necessary for

Fig. 11

shading the leaf, the stitch is continued in the same way but with different-coloured thread in the needle. The veining of the leaves, carried out in stem stitch, is worked in a well-contrasted shade on the surface of the solid filling, a pale green being the colour usually chosen. The chain stitch outline of each leaf is of the same colour as the filling. The material upon which all this lovely embroidery is placed is a fine white linen, slightly toned by age. The verbal descrip-

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tion of all the gay colour may sound distracting, but the effect of the whole is a fine glow of colour, enhanced by the constantly repeating and encircling golden stems.

The lady's skirt, coloured red in the picture, has a light buff-coloured pattern upon it. Whether it is embroidered or woven is difficult to decide, but it certainly is of an entirely different make from the jacket. The book, held in the hand, is a bright red. The zouave or cape worn over the shoulders is either black or of some very dark colour, and its presence is almost to be regretted, as it hides much of the embroidered work. The beautiful lace ruff is a very characteristic item of the dress of this period. One would not imagine a ruff even of this size to be very comfortable, but we read that they grew to such enormous dimensions that a lady in full dress was obliged to feed herself with a spoon two feet long, and that sumptuary laws were made, by which ruffs were reduced to legal size. The lace of which this one appears to be made is similar to those illustrated in many pattern books of the period.

At the present time there are in existence many examples of embroidered articles of dress which date from the sixteenth century. It was a period especially famous for general embroidering of articles of daily use, and of dress in particular, although as long as the art of embroidery has existed it must always have been more or less employed for the enrichment of personal attire. Costume in Henry VIII.'s reign and throughout Elizabeth's was renownedly extravagant. In all probability the energy of the professional embroiderer, being diverted from ecclesiastical objects owing to the developments brought about by the Reformation, was poured with greater force into this channel. Such a combination of circumstances is sufficient to account for this period being specially famous for embroidered dress. The Countess of Wilton, in her entertaining book "The Art of Needle-

work," gives an interesting account of the embroidery of the sixteenth century. All the smaller articles of costume, such as gloves, handkerchiefs, and pockets, were embroidered; even boots did not escape this attention, for they were fashioned of fine linen, embroidered with figures of birds, animals, and antiques. Henry VIII.'s "handkerchers" were edged with gold, silver, or fine needlework, and we know from portraits and descriptions how magnificent his apparel was. It is evident that the people followed in suit rather too close for the royal liking, for the King several times passed laws regulating richness of costume by the rank of the wearer; "none under the degree of knight might decorate their shirts with silke, gold, or silver." The costume of the time of Elizabeth's accession was splendid, and it gradually grew so very extravagant that, as in Henry's reign, laws were passed regulating the richness of dress by the rank of the wearer.

"That none under the degree of a Countess wear cloth of gold or silver tissued, silke of coulor purple.

Under the degress of a knight's wife, velvet in gownes, cloakes, savegardes or other uppermost garments. Embroidery with silke."

English queens and princesses from Saxon times down to the present day have frequently been famous for embroidery, and that Elizabeth takes rank amongst them is evident, for there are interesting examples of her work in existence. If we can believe the accounts of the number of dresses in her possession, a whole mansion or a suite of rooms at least must have been devoted to their storage. However, in times earlier than these, royal ladies were even more extravagant, for the Lady Rashidar, daughter of the Khalif El-Mu'izz, died at Cairo in the eleventh century leaving a wardrobe of twelve thousand dresses of different colours, just four times the number reputed to have belonged to Elizabeth.

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The student of embroidered dress can often find much that is interesting in pictures. In the collection at Hampton Court galleries alone there are many examples of this period, for it was also the day of famous portrait painters. The sight of these pictures, with the beautiful embroideries and lace ruffs in which ladies of the sixteenth century were painted, makes one regret that

embroidered dress is not more in fashion now. A return to the stiff ruff is hardly to be desired, but there is every reason to encourage the undertaking of an embroidered dress or other piece of work, something worthy, like the embroidery in the frontispiece, to be treasured up by descendants for generations to come.

G. C.

PLATE IV. A VEST AND CUFFS DECORATED WITH TRAILING CAMPANULA

AN embroidered vest and cuffs are illustrated in Plate IV. With the scheme of colour suggested they could be worn with either a white or a blue costume. The reproduction is slightly reduced in size; in the original the width across the top of the vest at its widest point is nine inches. The ground material is a fine semi-transparent linen-batiste; an ordinary linen might be substituted, as it would be easier to work upon, but the finer material gives a more dainty appearance to the embroidery. The work is carried out in "Filo-Floss" silk in delicate colours. The silk is used with two strands threaded in the needle almost throughout the work, the exception being in the case of the stems and tendrils, which are stitched with single thread. The vest is of the usual V-shaped pattern, chosen as being most likely to suit all tastes and requirements. The cuff is triangular, and intended to be used turned over, so it could be applied to any variety of undersleeve that happened to be in fashion. The line of green leaves, running diagonally across the plate on either side, marks the outer edge of the cuffs. The inner edges might be finished off in some way suitable to the style of the sleeve, using perhaps a minutely pleated frill, or a piping of blue to match the embroidered flowers.

To carry out the embroidery as it appears in our illustration is not difficult; there is, however, a fair amount of work in it, for the stitching is fine and the forms are solidly filled. Alternative and simpler methods of working the design are described at the end of this article.

The design is symmetrical, and is based on the trailing campanula. The flower is treated quite conventionally and several liberties are taken with it, in order to make it prettier for its present purpose. Purple berries and tendrils, which do not naturally grow on harebell stems, are introduced to add interest to the design and colour scheme. The band of pale blue, running in zigzag fashion across each flower, gives variety in colour; a device of this kind is often more decorative than naturalistic shading, though both ways are quite admissible and give the requisite variety.

Two stitches only are used in executing the work, buttonhole and chain, for the explanation of which refer to figs. 2 and 6. The chain stitch is worked in the usual way, but the buttonhole stitch, when used upon the flowers and leaves, is treated rather like a lace stitch, each succeeding row of stitching being worked over the heading of the previous row. This method, quite a common one, of working buttonhole stitch

AN EMBROIDERED VEST AND CUFFS.

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gives it a peculiar and interesting character. It has somewhat the ribbed effect of woven work, and there is also a little mystery to the uninitiated as to how it is done, though to those in the secret it is simplicity itself. The ribbed lines, caused by the method of working, in this case follow the shape of the flower; the same method can be employed in straight lines across any area, but lines following, and thus emphasising, an outline are more decorative.

The description of one flower will suffice, as all are worked to the same pattern. For the petals two shades of an indigo blue are employed, sufficiently distinct in tone to show a decided contrast to each other. For the stamens a pale golden yellow is used. To commence working, two strands of the deeper shade of blue are threaded in the needle and a preliminary line of silk is run round the circumference of the base of the flower, extending as far up either side as is required for the first band of darker blue (for which see the coloured Plate). This line should be run so as to pick up as little material as possible, in order to let the thread lie mostly upon the surface. It should be arranged to finish at the left-hand end, for the next process is to work a line of close buttonhole stitching (which is more easily done from left to right) over this laid line, and at the same time pick up a very small piece of the material with the needle at each stitch. The heading of the stitch should be towards the centre of the flower; the lines of stitching are worked from the base upwards, the flower being held so that the stamens point more or less directly towards the worker. The first row of stitching being completed, another preliminary line of thread is run along close to it, but not extending quite so far up. The buttonholing is then worked over this laid line, and at the same time over the heading of the first row of stitching, one stitch being placed between each one of the previous row. Next, a third line, still shorter in

length, is worked in exactly similar fashion; and last the small triangular-shaped piece in the centre, which ends, at the apex, with a line composed of only two buttonhole stitches. Whether a line is longer or shorter, curved or straight, it is always carried out in exactly the same way, by first laying a line of thread and then working over it, and over the heading of the previous row when there is one. The needle is now threaded with two strands of pale blue, and a line of thread is run along the material close to the zigzag line that has been formed by the limit of the part already completed. The buttonholing is then worked over the laid line of thread and into the edge of the darker blue, though not always into the heading, as that is not possible. This first line of pale blue must be clear and firm, for it is much in evidence. The zigzag line in pale blue is repeated twice more, for the light band across the middle is composed of three rows of buttonhole stitching; each time it is taken over a laid thread and the heading of the row before. To complete the bell of the flower, work three more lines of buttonholing in exactly similar fashion, but change the thread to the darker blue colour. In working the final row, care must be taken to make a nicely curved line, for this makes the upper outside edge of the flower; it is easily possible to humour the stitch a little, making it a little broader if necessary, to fill out to a requisite shape. The yellow stamens are worked with double thread in chain stitch. At the apex they are finished off by a couple of chain stitches, each arranged to point outwards, starting from the same base. The buds are worked in the same way as the flowers, the lines of stitching adjusting themselves to the required shape. The berries, which are of a purple colour, are worked with double thread, in buttonhole stitch worked in the ordinary way, but taken round in wheel fashion. That is done by making all the stitches enter at the same point in the centre of the berry,

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which naturally brings the line of stitching into circular form, as all the stitches are of the same length. The effect of all the stitches entering at the centre is to make a small perforation there, which improves the appearance. This perforation can be made larger by the use of a stiletto, either before or after the stitch has been worked round.

The stems and tendrils are worked in dark green silk, in a fine chain stitch with single thread. Stem stitch could replace it if preferred, but the former is particularly suitable for lines of this nature.

The leaves are worked with double thread, in two contrasting shades of green, the lighter in the middle, the darker on the outside. The requisite shades are obtained in this case by threading in the needle together two greens, of the same tone but of different kinds. For the lighter colour in the centre, a pale shade of grass green and of sage green are placed together; for the darker colour upon the outside, two darker shades of the same two varieties. This plan of placing two distinct colours in the needle at the same time is occasionally useful to adopt in order to obtain a special tint.

The leaves are worked in buttonhole stitch, in fashion exactly like the flowers. Commence on the inside edge of a leaf and work a line of dark green along its entire length. Next to this, work a line of light green, but not letting it extend the entire length in either direction; then a still shorter line of light green. To finish the leaf, work another line of the dark green from end to end. The outline on either side must be quite perfect; to obtain which it is necessary to adjust the

length of the inside lighter lines, and to vary them sometimes slightly in width.

For alternate methods of carrying out this design we suggest the following: An entirely different scheme of colouring might be arranged, such as yellow flowers, black berries, and purple stems. Another way of making a change would be to alter the stitches. Double back stitch might replace buttonhole for the flowers and leaves; the former would be quicker and easier in execution, even taking into account the possibility of having to add an outline in stem stitch. Roumanian stitch, which has not yet been described, would be particularly suitable for working both flowers and leaves in. It shows silk threads to advantage; it would not take so long to work, and would need no outline. It would not be quite so durable, however, as the method already described. An absolutely simple way in which to carry out this design, and a quite effective one, would be to work it in outline in chain stitch, employing clusters of French knots for the berries. Such a scheme in dull gold, or blue, or even white, would give a pretty light effect of tracery, quite suitable for dress embroidery. As to alternate silks, Filoselle could easily replace the "Filo-Floss," or Floss silk could be used instead, if the difficulty of dividing it and working with it is no objection.

The silks used in carrying out the design, as represented in the plate, are the following:

Dark blue	No. 12a	.	.	.	about 5 skeins.
Pale blue.	No. 10	.	.	.	" 3 "
Greens	{Nos. 48a, 49, 125e, 125c, 151 . . . }				" 1 skein of each.
Mauve	No. 120y	.	.	.	about 2 skeins.
Yellow	No. 91b	.	.	.	" 1 skein.

G. C.

SILK : ITS ORIGIN, CULTURE, AND MANUFACTURE

THE Silk Trade exhibits, perhaps better than any other, the world-embracing complexity of modern industry. Drawing its supplies from regions as far apart as the interior of China and the Auvergne Department of France, with a continuous history stretching back into the remotest ages, employing tens of thousands of families of every diversity of race and language, it serves to bring before the mind the amazing organisation involved in what appear at first sight to be the simplest transactions. But apart from the almost romantic interest attaching to a study of the trade itself, it is of considerable importance to those who use silk for embroidery, or other purposes, that they should have some knowledge of its genesis and manufacture. The good artist or craftsman should have a technical knowledge of his materials, not only because it makes it so much more interesting to work in them, but also because it gives him the necessary insight into their possibilities and limits. It is not sufficient, for instance, that the designer should be able to make an intrinsically good drawing if it is not one that is suitable for perfect execution in the material for which it is intended. The aim, therefore, of the three or four articles of which this is the first is to give some account of the "life-history" of silk from the egg of the moth to the dyed and finished product, and incidentally perhaps of some of the other threads which are put to similar uses.

For the purposes of Embroidery the textile threads may be reduced to four: Silk, Linen, Cotton, and Wool; several others exist, but it is unnecessary to treat of them here. Each

of these four has its special merits, but by common consent Silk is pre-eminent, since it is by the standard of silk that the others are appraised. Linen, for instance, is said to have a fine "silky" texture with great strength and durability, but it is neither as silky nor as strong nor as durable as silk itself. The merits of Cotton are its softness and pliability, yet silk is softer and more pliable than cotton, though the latter is admittedly supreme in one respect—that it is capable of being bleached to a purer white than either of the four, and has also a certain dryness of texture which no other thread can equal.

The history of silk, in both ancient and modern times, has been so well and fully written that there is no need to give more than the briefest outline of it here. A Persian legend attributes the discovery of the silkworm to Job, and in his honour the method of culture which he is supposed to have initiated is still followed there; but it would probably be more historically accurate to credit the Chinese with being the first who managed to rear silkworms and draw off their silk. The Emperor Hoang-Si, who lived 2600 years before our era, is said to have charged his consort to study the silkworm, and to endeavour to make use of the threads; even to-day there remains in the neighbourhood of the Imperial Palace a street with a name which means "the street which leads to the place for the rearing of silkworms for the amusement of Queens and Empresses." An early edict, which is nothing if not laconic, shows how jealously the discovery was guarded. It runs: "Forbidden under pain of death to export the eggs of the silkworm."

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It was not, indeed, until the sixth century A.D. that two monks succeeded in bringing the eggs to Europe, when sericulture was established by the Emperor Justinian in the Peloponnesus, since known as the Morea, from the quantity of mulberry trees (Latin, *Morus*) which grow there. Thence the industry spread into Sicily, and was subsequently introduced into France by the Popes during the Babylonish captivity in the fourteenth century. Little progress was made with it there until the reign of Henry of Navarre, nearly three centuries later, when the energy of one Olivier de Serres gave it a strong forward impulse. Under the régime of Colbert (1660) still further encouragement was given to the silk-farmers, but the revocation of the Edict of Nantes—"reassuring the religious, causing the wicked to tremble"—banished the Protestant families of the Cevennes, and changed the fortunes of the newborn industry. From then onwards, until the beginning of the nineteenth century, it had a chequered career, but we have not the space to follow it further here.

At the present day the silkworm is cultivated in five principal centres, each of which, broadly speaking, produces a type of silk peculiar to itself, and readily distinguishable from the others.

First in quantity of production comes Southern Europe, where the industry is sporadically carried on in an area of which Broussa, in Asia Minor, is the eastern, and the north of Spain the western limit, the centre being the city of Milan, the greatest silk-market in the world. The two principal characteristics of the European product are that it is a yellow silk, the cocoon being of a pure golden yellow; and, secondly, that the thread is finer and somewhat more even than either of the others, owing to the superior methods of cultivation and reeling in vogue. It is mostly used for upholstery and dress goods, specially as a warp for the latter, where evenness is the prime essential.

The next largest producer is Japan, which

yields a "white gum" silk, also fine and even but neither as fine nor as even as the European article. The cheap piece-silk made from it is known everywhere, and it is also largely used as weft in conjunction with other kinds.

After Japan comes Northern China, the centre of the industry being Shanghai. Embroidery silks being principally made from China silk, it is worth while to examine its genesis and history a little more fully. The product is the whitest and firmest of any, and, despite the manifest shortcomings of an industry which is conducted on much the same lines to-day as it has been for the last four thousand years, it remains probably the best in the world. It is rather an interesting reflection that the Chinaman generally excels in the few arts and industries to which he has ever applied himself; his porcelain, his ivories, or, to mention commoner things, his tea and his silk are each supreme of their kind. Are we to say that this is in spite of his old-fashioned methods, or because of them? The quality of the silk ranges from what is known as "first order steam filature," commanding the very highest price, to the roughest and foulest imaginable. Unlike other cultivators, who describe their silk by the place of origin and size—Japans, for instance, being simply designated "No. 1-1½ Japan 13/15 denier," etc.—the Chinaman still calls his silk by his "chop," or trade mark, some hundreds of which chops exist, and are continually disappearing, reappearing, and often varying in quality to a bewildering extent. In each bale there is a small, roughly printed paper with a device of elephants, demons, lions, or what not, the quality being usually indicated by the colour. The "elephant chop," for instance, begins with a red elephant, after which comes a blue elephant, then a yellow one, a green one, and so on. Some of these chop tickets are most artistically executed, particularly the "worm and leaf," "almond flower," and "pæony and phoenix." Most of the tussore, or wild-grown, silk used in commerce comes from China, although it is

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grown to some extent in India also. Tussock silk is dark brown in colour, and of a coarse, rough nature, the thread being from twice to four times as thick as any other, characteristics which are due to the fact of the worm feeding on the oak instead of the mulberry. In the raw state it has a peculiar pungent smell, though this is almost entirely removed in the process of dyeing, and entirely so if the silk is bleached.

The defects of China silk generally are, firstly, its irregularity, which is due to antiquated methods of reeling; and, secondly, the "nibs" and "gouts" which are found in all but the best chops. The thread can be cleared of these lumps in the consequent processes of manufacture if they are not too small in size or too many in number; but if it is fine nib and the silk is full of it, the lot of the girl who subsequently has to rewind it is not an enviable one.

We need not dwell for long on the remaining two countries which produce silk. In the Canton district of Southern China a fairly fine yellowish-white silk is cultivated which, however, shows defects much to be feared by the manufacturer who subsequently has to deal with it—namely, "sleeziness" and "lack of bone." "Sleeziness" consists in the existence on the thread of minute specks and excrescences only perceptible to the trained eye while the thread is in the raw state, but very visible after it has been dyed and woven. The expression "lack of bone," or "nerve," explains itself, and is shown in the limpness of the silk, which is consequently unsuited for the production of most high-class goods, with the exception of the various crapes, for which, as naturally limp and clinging fabrics, it is peculiarly suitable. Both the above defects are due to the fact that the culture is not carried on under conditions which are perfectly suited to it.

Of Indian silk no more need be said than that it is again a yellow-gum silk, similar in quality to Canton, and with about the same amount of "nerve" in it.

To resume then, silk is the product of the silkworm (*Bombyx mori*), and of the silkworm only—a fact which cannot be too plainly emphasised in view of the vagueness on the subject which exists in the public mind. Numerous attempts have been made to imitate and supplant it, and with varying degrees of success. Some have tried natural substitutes, such as nettle fibres and spiders' cocoons, and an experiment has even been made with the idea of drawing the silken fibre direct from the mulberry leaf, without its passing through the body of the caterpillar. Others, with much better results, have made artificial substitutes, the cellulose fibre now so largely used for braids and ties being the principal one. The rival textile threads are also treated by various processes, of which mercerising is the best known, to make them resemble silk in certain respects. But the degree of their success is the measure of their inferiority, and whatever chemical science may produce in the future, hitherto *Bombyx mori* has held his own.

Most people have kept or seen silkworms, and so, whilst a detailed description of their appearance and habits is unnecessary, some account of their method of making the silk and spinning it may be of interest. The apparatus which secretes the silk in its semi-fluid state consists of two glands, from each of which a separate thread proceeds, called the "brin," and when united the "bave." At the point where these two glands unite there is a further pair of much smaller glands which yield a kind of varnish having a threefold use: firstly, it serves to unite the two brins into the bave so firmly that they can only subsequently be separated with the utmost difficulty and under a microscope; secondly, it preserves the lustre of the silk; and thirdly, gives it the property of resisting the action of water. The united thread then passes from the two glands through a short canal terminating in a minute papilla situated just beneath the worm's lower lip, and pierced with a hole at the end. Through this hole the cater-

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pillar projects the silk in whatever direction he chooses.

The method of rearing the silkworm necessarily differs according to the climate. In China, when the leaves of the mulberry tree first show themselves, open boxes containing the seed are hung upon the branches at a little distance from one another. As soon as the eggs are hatched by the heat of the sun, the caterpillars begin to spread themselves over the tree, and upon it they undergo all their subsequent transformations. Finally, they hang their cocoons upon the twigs, and the rearer has only to gather them as they form, nor has he any other trouble in the meantime except to scare off the birds.

In Europe this method has proved a failure every time it has been tried, rain or the birds interfering to prevent the experiment being carried to a conclusion. Consequently a purely artificial system of rearing is followed, called the Dandolo method, after the name of its inventor. In this case the silkworm spends his whole life in a "magnanerie," or nursery, under cover, being fed with the leaves by hand, and finally given branches of broom to spin in. By whichever method the rearing is conducted, the history of the caterpillar stage is much the same. It lasts some fifty days, divided into five stages, each marked by a period of voracious eating, and each ending by the casting of a skin. On the critical day of their whole career, the seventh of the last stage, it is estimated that the silkworms produced from 1 gramme of eggs eat as much as four horses, and the noise in the magnanerie made by their mastication is like that made by heavy rain in the thick foliage of a tree.

Suppose the caterpillar has successfully

passed through the various crises and diseases to which he is subject—and in a normal year at least a fifth of them will have succumbed by this point—and supposing the *montée*, or climbing up to spin, has been accomplished, he at once sets to work. First, he extends in every direction the slender and gummy thread which comes from his mouth. These first threads, which form the *bourre de soie*, are the filaments which suspend the cocoon. This done, the real silken thread is next reeled out, and usually measures about eleven hundred yards in length. Some idea of its extreme fineness may be gathered from the fact that a single ounce weight of it, if unrolled, would stretch for sixty miles. The time occupied in spinning is usually seven or eight days, and if allowed to proceed the caterpillar would rapidly shrivel to a chrysalis inside the cocoon, then turn to a moth, which in another fortnight or three weeks would eat its way out. But at this point man steps in and begins the first of the processes by which he transforms the sanctum of *Bombyx mori* into a thread of fabric for his own use.

Before leaving the ingenious little spinner of the original thread and proceeding to trace its further treatment by the hand of man, we may pause a moment to marvel at the inherited knowledge, the exquisite precision and delicacy of this humblest of creatures. To explain it all as individual instinct taxes belief too high, and we shall perhaps be approximately nearer the truth if we put it that in this capacity the worm must be considered not as *a* worm but as *the* worm, an atom embodying the racial instinct, the principle which underlies, which never dies.

H. W. R.

A PIECE OF XIVTH CENTURY GERMAN WHITE LINEN WORK

SOME EXAMPLES OF THE USE OF CHAIN STITCH

THE qualities of adaptability, simplicity and durability, all of which most distinctly belong to chain stitch, have combined to make it universally employed. It is adaptable to almost any kind of design, it can be worked in almost any thread, metal, wool, silk or linen, and it can be used equally well for outline, solid or semi-solid work, either in conjunction with other stitches or alone for an entire piece.

In figure work, chain is about the best stitch for features or draperies, as no other *draws* with such precision. When carried out in a frame, a necessity for the kind of work just described, chain has to take the form known as split stitch. This produces practically the same effect, though the execution of it is different. One of the difficulties which must be mastered by an embroideress is *drawing* by means of a needle and thread; but she soon discovers what a delightful medium needle and thread are to work in, both for the pleasure and for the results obtained.

Fig. 13 is a drawing of a flower solidly filled in with chain stitch. It is a detail from an Oriental masterpiece of this type of embroidery, a large coverlet, probably copied from a Masulipatam print. The design is

a tree, springing from a rock and bearing flowers of many different kinds. Gorgeous butterflies occur here and there upon it (see fig. 14), and a narrow but very lovely border runs round the margin. In the two details illustrated, the forms and the various markings are clearly shown by means of a contrast in colour and in the direction of the lines of stitching. In work of this kind great use should be made of these two points as otherwise it may become monotonous.

Chain stitch is frequently used for outline work, whether simple or elaborate. Fig. 16 is an example of an extremely simple but effective piece of this kind. It forms part of an infant's christening robe, a piece of early nineteenth-century English work. A double band of the design repeats down the front, and a single band runs round the base. It is worked in white on muslin. Many Indian embroideries afford fine examples of this elaborate outline work.

There are a good number of examples in existence of a very beautiful kind of work into the execution of which chain stitch entered largely. We refer to the well-known fourteenth-century white linen work of

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German origin, of which the frontispiece is an example. It is remarkable for the individuality which characterises it, and for the boldness and simplicity of its design. The work is nearly always executed on a loosely woven linen in coarse linen thread, and the stitches employed are mainly varieties of chain and buttonhole. The frontispiece illustration

Fig. 13

is a detail from an altar-cloth band. It represents a man with an uplifted stick holding in check three saddled horses; below is a dog. The group probably illustrates an incident in some well-known story. The leafy scroll work surrounding the figures is carried out mostly in chain stitch worked in a double line (for a further explanation of which see fig. 22 and its description). For

the more solid portions of the design the chain stitch changes into buttonhole, with which it is of course closely allied. Various details in the drawing are skilfully explained by the arrangement of the lines and masses of stitching; a narrow line of ground material is left clear in parts, in order to express some detail such as the belt round the man's waist, or the harness of the horses. These lines show with especially good effect when the work is seen against the light. In fact, the entire design seems arranged with

Fig. 14

that idea in view, for its beauty lies not in fine detail, but in bold outlines and well-arranged masses of solid pattern upon semi-transparent ground.

The bunch of variegated flowers illustrated in fig. 17 is an example of the use of chain stitch combined with others. The outline is in chain and the semi-solid fillings are of various other simple kinds such as satin, French knots, Roumanian, etc. It is a detail taken from a white table-cover of late eighteenth-century French work.* This bunch of flowers could be worked most prettily in colours in shaded embroidery.

Fig. 15 is a detail from the border of a very fine example of work executed

* No. 1030, 1855, Victoria and Albert Museum.

Fig. 15

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entirely in chain. It is a coverlet from the Dutch East Indies and belongs to the seventeenth or eighteenth centuries.* The border, in the original about 16 inches in width, repeats in similar fashion to the portion illustrated all round the edge of the coverlet, the apparent irregularity of the design becoming regular by similarity and repetition. Two other animals and a ferocious black bull in the act of butting, luckily only

Fig. 16

flowers, and a fierce open-mouthed tiger, recur along the border at regular intervals in the place of the stag.

The lines filling in the more solid portions of the design show the direction taken by the chain stitch fillings. These lines either follow the outline, so emphasising the shape, or explain the form, as in the case of the stag. Both drawing and colour are particularly refined. A brief description of the colours employed in the execution of the illustrated portion may be of interest to those who cannot see the original. The stag is outlined

with rose red, the same colour being used for his antlers, and the body is filled in with a golden yellow. The large flower near the beast's tail has each petal outlined in pale pink and filled in with deep rose colour, whilst the four calyx-like leaves in the centre are worked in golden yellow. All the stems and some of the smaller leaves are outlined in dark myrtle green and filled with a very pale shade of the same. The long serrated

Fig. 17

leaves are similar to this with a line of gold colour added just inside the outline, the trefoil leaves are fancifully varied, some rose red with gold outline, others with one green lobe and two red ones, some blue and red, and so on. The colouring of the two large flowers near the base is similar to that of the other large flower. The ground material is a fine white linen.

Work carried out entirely in one stitch always gives a peculiar satisfaction. The great example of this is tapestry weaving,

* No. 256, 1899, Victoria and Albert Museum.

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part of the marvellous effectiveness of which lies in the absolute similarity of texture obtained by working both background and pattern by one method. The large hangings

of Petit point work and the smaller pictures of the same work may be mentioned as other examples of the charm of simplicity and unity of method of execution. G. C.

PLATE V. A BAG WITH A DESIGN OF FLOWERS AND SCROLLING STEMS

PLATE V illustrates a bag embroidered with conventionally-treated flowers springing from undulating stems, which run diagonally across the surface. A repeating pattern of this kind is a very useful type of design, as it may be used for a great number of purposes. Like a woven fabric, that can be cut to any required shape, this kind of pattern would decorate a circle, a square, or any other form equally well, since having no limits it need conform to no special outline. If the worker wishes to use this design for a larger or smaller bag, all that is necessary is to extend or curtail it on the four sides, and then to add the borders at the top and base.

The back of the bag has a different and simpler ornament. The same borders as those upon the front run round the other side, and there is no further decoration upon it beyond a simple interlacing knot at the centre (see fig. 18).

It would have been possible, by certain adjustments, to have continued the pattern which is upon the front, round to the back without any apparent junction at the sides; but that would have entailed a good deal more work than as the pattern is now arranged. The material of which the bag is made is a fairly coarse, loosely woven linen of a greyish white colour, and the embroidery is carried out in "Mallard" floss silk, in bright shades.

The curved lines of the stems and tendrils are worked in stem stitch (see Part I) in a dull purple. Whilst working them the

thread should be kept on the right-hand side of the needle, and small neat stitches should be taken in order to obtain flowing curves, which are especially necessary in working the tendrils. The leaves, which are all of about the same shape and size, are worked in double back stitch (see Part I).

Fig. 18

This similarity of treatment of stem and leaf is necessary to give a certain unity to the whole, since the flowers all differ. Two shades of green are used for the leaves, a warm and a cool one, and they are used in regular alternation, undulating lines of either shade running upwards diagonally across the bag, from left to right.

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The colour follows the same undulating band arrangement as the two kinds of green leaves. In order to describe the working of each flower, we will name them alphabetically, and we will begin with the red one, of which a single petal can be seen at the top right-hand corner, and continue in diagonal lines from left to right in a *downward* direction. Thus, the second to be described is the one in shades of blue with a gold centre, that is cut in half by the top border; the third is the full-blown carnation, and so on.

A. Petal, outlined in buttonhole in dark red, filled in with satin stitch in pink. Centre, purple French knots.

B. Petals worked in buttonhole taken across from side to side, so that the heading forms a ridge between each petal and the adjoining one. Colour, two contrasting shades of blue used alternately. Centre, yellow French knots.

C. Each petal has a band of buttonhole next the centre in bright red, then a narrower band of the same stitch in pink, next to this a line of irregular chain stitch in bright red, and is finished off at the edge with a vandyked band of buttonhole stitch in pink. A line of stem stitch in white separates each petal from the next. Centre, purple French knots.

D. Petals, outlined with a narrow edging of buttonhole in dark blue, filled in with double back stitch in pale blue. Centre, pale yellow French knots.

E. Petals, outlined in stem stitch in pale yellow, filled in with double back stitch in deep yellow. Calyx filled in with satin stitch in bluish green, outlined with stem stitch in dark green.

F. Berries worked in buttonhole in dark blue, the stitches being taken round in a circular shape, and all entering at the same point in the centre. A deep yellow French knot decorates the outside of each berry.

G. The outer part of the petals is worked in buttonhole, in bright red, the inner part

in double back stitch in pink, and outlined with stem stitch in the same colour. Black stamens are placed between each petal, terminating in a French knot. Calyx worked in double back stitch in bluish green, outlined with stem stitch in dark green.

H. Petals outlined with chain in pale blue, filled in with satin stitch in dark blue. Centre, yellow French knots.

I. Petals worked in buttonhole, in bright yellow.

J. Petals worked in double back stitch, in red and white alternately. Centre, purple French knots surrounding three yellow ones.

K. Petals outlined in buttonhole in pale blue. The star-shaped form is worked in satin stitch in white, over a preliminary stitch, laid lengthways. Centre, deep yellow French knot.

L. Outer edges of petals worked in satin stitch in bright red, inner part filled in with chain worked spirally round to the centre in shades of pink graduated to white. Centre, purple French knots. Calyx leaves worked in double back stitch in bluish green.

M. Bell-shaped flowers outlined at the back in stem stitch in dark blue; inside this, and taken all round, a line of stem stitch in pale blue: then a line of chain in white, taken down the centre of each lobe. Two yellow French knots to each flower.

N. Petals outlined in stem stitch in deep yellow, filled in with double back stitch in pale yellow. Centre, purple French knots.

O. Petals outlined with two rows of stem stitch in bright red: inside this, two rows of the same in pink, filled in with double back stitch in white. Centre, purple French knots.

P. Bell-shaped flowers outlined in stem stitch in deep yellow, filled in with satin stitch in pale yellow.

Q. Flower outlined with a band of buttonhole in dark blue: inside this, filling up to

A BAG.

(For particulars see page 60.)

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the centre, three semicircular lines of buttonhole in pale blue. Stamens worked in white satin stitch, over a preliminary line laid lengthways. Pale blue French knots, placed at intervals upon dark blue outer band. Calyx, worked in double back stitch in bluish green, outlined with stem stitch in dark green.

R. Berries outlined with buttonhole in pink, filled in with stem stitch, worked spirally round towards the centre in paler pink. Black French knots on the outside of each berry.

S. Petals outlined with stem stitch in dark blue, filled in with double back stitch in paler blue. Centre, white French knots, surrounding black ones, in the middle.

T. Petals worked in buttonhole in deep yellow.

U. Petals worked in buttonhole in two alternating shades of blue. Centre, purple French knots.

V. Petals in Roumanian stitch, the outer part in bright red, the inner part in white. Centre, purple French knots. Stamens formed by a line of open buttonhole worked round outside the French knots in pale pink.

W. Petals in double back stitch in two alternating shades of blue. Calyx in satin stitch in yellowish green, outlined with stem stitch in dark green.

X. Petal worked in buttonhole in bright red, the heading forming the outside edge.

The description of the upper border, which is worked in lines taken horizontally across, begins from its lower edge. First a line of chain in deep purple, next to this a line of double back stitch in the same colour. Then a line of chain in dark green worked in zigzag fashion. This is a variation from the common chain, each stitch being taken at an angle of 45 degrees to the border line, and at a right angle to the previous stitch. When working zigzag chain stitch, the end of each completed loop should be caught down with the needle just as it commences

the next stitch, thus fixing each loop firmly in position. A pale blue French knot is placed in each triangular space left by the working of the zigzag line. Next, a line of chain stitch in dark purple is worked, and finally a line of buttonhole to form the top edge of the bag. This last line is not worked until the bag is finished and made up, for it fixes the lining in place. Little orange-coloured buttonhole loops are worked at intervals along the top, to hold the tiny metal rings. These loops, or picots as they are sometimes called, are made by button-holing over a single thread of silk looped into the heading of the last row of stitching.

The working of the lower border is described from the top downwards. First a line of chain, then a line of double back stitch, both in the same dark purple. Next to this a line of vandyked Roumanian stitch (see fig. 19) worked in pale blue and green alternately, five stitches of each colour being taken in turn. Below this comes a line of double back stitch in dark purple, then a line of chain in dark blue. Next a line of double back stitch and one of chain, both in dark purple. A line of stem stitch in black finishes the border.

The interlacing knot at the centre of the back (see fig. 18) is worked in double back stitch, in a medium shade of yellow, and outlined on either side with a line of stem stitch in purple. The conventional flower in the centre is worked in dark blue; it is outlined with stem and filled in with satin stitch. The calyx leaves are worked in double back stitch in deep yellow, whilst a French knot of the same colour marks the centre of the flower.

The bag can be lined with white silk, and finished off at the edges by a cord made of the same shades of purple and white as those in the embroidery. The cord is sewn on to the three sides, and also runs through the rings at the top, thus forming a handle.

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The following shades of "Mallard" floss are used in carrying out this design:—

Purple . . .	No. 268, about 5 skeins.
Greens . . .	Nos. 134d, 134i, 207e, about 1 skein of each.
Blues . . .	Nos. 20f, 20b, 20d, about 2 skeins of the lightest and darkest shade, and 1 of the middle shade.

White . . .	No. 70, about 1 skein.
Black . . .	No. 82, " 1 "
Yellows . . .	Nos. 252, 255, 256, about 1 skein of each.
Reds . . .	Nos. 44, 41a, 40, about 2 skeins of the darkest shade and 1 of each of the others.

G. C.

SAMPLERS AND DESIGNING

WE all of us remember little framed squares of work banished to out-of-the-way corners of the house, which we were told were samplers, in a tone which implied that they were wrought in the days of ignorance. I seem to have had the opinion that they were an inferior kind of picture which our grandmothers had to be content with before chromos and oleographs and illustrated papers were invented. There came a later time when I thought they were rather pretty old things, and collected a sufficient number to give me an insight into their variety and yet resemblance in the use of frequently recurring elements. More recently still they have been made the subject, like everything else, of quite learned treatises, and much about them may be read in the interesting volume by Mr. Huish.

In devoting some time to a consideration of some of the best ways of opening up initiative in workmanship,—which now we usually call "design,"—to young people, I have been brought again to an interest in the samplers from this other point of view, which really, I think, explains their origin and purpose. The sampler is properly a collection of several elements which would be useful to the girl and housewife in marking linen, and making borders, sprigs, and other common requirements of ornamental needlework.

The earliest samplers I have seen are long, narrow strips, and have a far greater variety of stitches, letters and patterns. The later

ones tended more and more to neglect of this, their proper purpose, and became at last a means of teaching children texts and hymns, some of which were peculiarly melancholy, as the seeming experience of Mary Jones, aged 5, for it was a part of the tradition that they should sign their names and ages. One I have before me reads:

"From stately palaces we must remove,
The narrow lodging of a grave to prove;
Leave the fair train, and the light gilded room
To lie alone benighted in the tomb."

This is signed "Jane Brampton, aged 9 years, 1761." But all about are pretty little birds, baskets of flowers, daisies, lilies in pots, Noah's Ark trees, hearts, fleurs-de-lis, and other bright and amusing details, in which Jane probably took a healthy and hearty pleasure. Another, signed "Alice Wharam, 1735," has in the top left-hand corner Adam and Eve with the reference "Genesis, 3 chapter," and in the bottom right-hand corner the Virgin and the Angel, inscribed "The Salutation, Luke, chapter 1st." In the middle is an immense parrot; in the bottom left-hand corner is a sort of poultry and rabbit farm, while in the top right-hand corner is a lady walking under a tree in which sings a bird. The rest of the ground is filled with fruit, flowers in pots, ducks and geese, cherubs and crowns, and so on; and a peculiarity of this example is that the ground is wholly covered with silk stitching of a fair blue colour. The latest

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samplers I have seen are dated about 1840 or 1850, and I believe people have told me, but always shyly, "because you know samplers have gone out," that they themselves remember working them. I spoke above of design, a rather terrible and mysterious word, which has come much into use to frighten people into the idea that without a drawing from a shop they cannot enter upon a piece of work of their own. Now if we could get back a reasonable form of sampler once more, we should do much, I think, to reintroduce a reasonable view of what design in simple household arts has been in the past, and should be ; that is, the doing of work with some thought beyond the barely necessary, by selection, and variation from, well-known models. This, at all times, has been the largest element in forms of beautiful work-

manship. For it must be remembered that design concerns itself with workmanship, and there is not the least need to make preliminary drawings, if ways to pleasant adaptations and adjustments can be found without them. The modern sampler should consist of one or more alphabets, sets of figures, simple sprigs, and borders, and devices, such as could be re-used in various sizes, colours and combinations. If, beyond this, the child could be induced to paint with her needle one or two flowers from the garden, and her favourite pet, be it cat or bird, it would add enormously to her equipment, and give her the confidence to see that the embroidered dress, curtain, or counterpane is only a larger and more difficult form of *sampler*.

W. R. LETHABY.

STITCHES—II

ROUMANIAN STITCH—DOUBLE CHAIN STITCH—TRELLIS STITCH

IN the articles that will run through this publication, there will be no special grouping together of similar kinds of stitches. Those necessary for working out the coloured plates in each number will be given, unless they happen to have been previously described. Others will be added which, for one reason or another, may be thought desirable. Those to be discussed in the present number are Roumanian, Double Chain, and Trellis. The first named is in frequent request and therefore one with which every one should be familiar ; the second is not so well known, but it is simple and useful ; the third is a very attractive stitch and possibly new to present-day workers, though it was in quite common use in the late sixteenth and early seventeenth centuries.

ROUMANIAN STITCH.

Roumanian, an easily executed and very adaptable stitch, can be used in various

ways either for fillings or for line work. Fig. 19 shows it in work upon the petals of a flower ; in the diagram, owing to the form of the petals, the stitches are drawn into a vandyke shape ; a more usual method of treatment is to take them straight across in lines, as shown in fig. 20, but the stitch is practically the same in either case. Both these methods are commonly used ; in that first described the opposing directions taken by the thread give the pretty effect of two shades of colour. In order to work Roumanian stitch, as shown in fig. 19, bring the needle and thread through at the top left-hand corner of the flower petal, insert it at the top right-hand corner, and bring it through again at the centre top point, which, in this case, is slightly lower than either of the sides. The thread must now be pulled through on the upper side of the stitch that has just been taken. Next, insert the needle immediately below the point where it last came through, and over

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the first part of the stitch just formed, in order to tie it down. Then bring the needle through to the surface again on the left-hand side of the petal, and immediately below the point where it originally started. It is now in position to commence the next stitch. In the diagram, the completed petal shows varied shades of colour, an effect which is easily produced by bringing a thread of the required shade through the material at the

Fig. 19

right point. A chequering of two contrasting colours is managed in the same way, which is a very pretty method for working a flower.

When the stitches are placed very close together, it is sometimes wise, when reaching the point where the thread comes through in the centre, to bring the needle up through the middle of the last tying-down stitch. This avoids any possibility of clumsiness at that point, and also makes an effective "chained" line down the centre. There is another slightly different way of working

the tying down, or second half of the stitch, this is to take it obliquely across the first half, as shown in fig. 21. This divides the completed stitch into three more or less equal parts, and avoids the distinct ridge down the centre, which it may at times be better to do. Worked in this way Roumanian stitch makes a particularly good filling for a large leaf or flower; bands composed of it, often varying in shade or colour, are placed side by side until the surface is covered. Still another method of treating it is to space the stitches a little apart, and make the central tying-down part rather longer in order to connect the detached bars together. Worked thus it makes a good open filling for a leaf or flower, an

Fig. 20

Fig. 21

illustration of which, in actual practice, can be seen in the flowers in Plate VI.

DOUBLE CHAIN STITCH

Chain, like all principal stitches, has many slightly varied ways in which it can be worked. We propose now to describe a way of working it in a double line. This is a useful and quickly worked variety, adaptable to such details as broad stems, petals of flowers, or any similar form that requires a filling not absolutely solid. A very wide petal, if divided into sections, can be worked with it. The stitch can be executed in any thread, but is perhaps especially suited to the coarse kinds. Fig. 22 illustrates it worked upon both the petal and the stem of a flower. Slight alterations of the position in which the needle picks up the

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material give a different character to the stitch. In the diagram the stem is worked a little differently from the petal.

To carry out the petal illustrated in fig. 22, begin by working a single chain stitch at the apex, then work a second in the usual way, placing it towards the left side of the petal. Now take the needle again through the centre of the first stitch, but on the right-hand side of the second, and bring the needle through below in the usual way, but

Fig. 22

pointing towards the right-hand side of the petal. This process will have formed two stitches in a line with each other, both emerging from the centre of the first one. For the fourth, insert the needle in the centre of the second chain stitch, on the left-hand side of the stitch already there, and bring it through below (see the needle in the diagram). Repeat the stitch alternately on either side, making the needle, as it picks up the material, follow the outline of the petal. It is thus quite simple to follow out a gradually widening or narrowing shape.

The only difference in the working of the stem is that the stitches are not stretched out so wide apart and they are not placed quite opposite each other. Each successive one is placed a step beyond its neighbour. In the piece of white linen work illustrated in the frontispiece much use has been made of this stitch. The reader, having first mastered it, may be able to discern in the stems, leaves and some other portions, several adaptations of it. She should also notice how easily it merges into buttonhole filling when the form becomes too wide for double chain.

TRELLIS STITCH

The stitch illustrated by the three diagrams in fig. 23 is suitable for solid fillings. Used as a line stitch it would be quite ineffective, but for a filling, either self-coloured, shaded, or with bands of contrasting colours, nothing could be prettier of its kind. It is not very difficult to work, but has the appearance of being rather a marvellous and intricate piece of stitching. Occasionally upon seventeenth-century samplers, and more frequently upon Elizabethan costume, this filling can be seen employed for the entire execution of details such as birds, snails, petals of flowers or acorns, and they are most charmingly effective. The filling is usually carried out in straight lines to and fro across the space, but it can be worked in curved, and even spiral lines.

The upper left-hand diagram in fig. 23 shows how to begin working Trellis stitch, a name adopted because we know of no other, and because it is descriptive of the effect (see the flower petals in Plate VII). The first process is to work an outline in chain stitch all round the form, whatever it may happen to be, bird, petal, or anything else, that has to be filled in. This is necessary because the stitches of the filling do not enter the ground material at any point, since at the commencement, finish, and each extremity of a line they are looped into the chain outline. In

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this and some other particulars the stitch resembles the fillings of needlepoint laces. A back or stroke stitch may be substituted for the chain outline, the difference between these and the chain being that they would be entirely hidden when the filling was completed, whilst the chain stitching would be half in evidence, the part in sight forming an edging exactly like a line of stem stitch. The right-hand upper diagram shows how to begin the filling. The thread is brought

Fig. 23

through to the front at the required point in the centre of the chain outline ; but in the diagram, in order to explain the working more clearly, only a portion of the chain outline has been drawn, so the thread does not come up in the middle of it. The filling would usually commence at the left-hand top corner, because a stitch of this kind is more easily worked in the direction of left to right. The needle now passes the thread up through the adjoining chain stitch, exactly as illustrated in the figure.

The second diagram, that at the top right-hand corner of fig. 23, shows the second stage of the working, which is, the needle passing the thread through the loop just formed. The thread must now be pulled fairly tight, which will disclose that by the foregoing processes a small knot has been made, which takes a decidedly slanting direction. The same routine is repeated all along the line, a stitch being looped into each of the chain stitches. The lower diagram in fig. 23 shows how to continue at the end of the first line. A second row is worked, in the reverse direction, the stitches being looped into the row above. The diagram shows the exact point where the thread enters the first row and also how it is passed through the loop again, in the same manner as before, but in the reverse direction, which makes the second row of knots slant in the opposite way. There may be a little difficulty at first in finding the exact point at which to pierce the row above, but practice soon makes it quite simple. At the right place there is a small hole, just large enough to pass the needle easily, but at any other point the knot would form a serious obstacle. One stitch should be taken between each one of the row before. This is important, for the regular arrangement of the stitches, together with the alternating direction of the knots in the successive rows, gives the special interlacing character to the filling. When the last row has been worked it can be attached to the chain outline by a neat oversewing in fine thread of exactly the same colour as the filling. A novice attempting to work trellis stitch had better choose rather coarse thread for the trial, and avoid pulling the knots too tight. She should also be careful not to place them too close together, as that makes the execution more difficult. It is as well not to begin a new thread in the middle of a row, though it can be done if necessary. If it is done, however, the new thread should be run, for the start, into the under-part of the filling, not into the material. Sometimes when

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working shapes like petals, that grow narrower towards the base, it becomes necessary to omit a stitch now and then, as otherwise the filling would not lie flat and even. These stitches should be decreased at either extremity of the line where possible, because there they will be less noticeable.

There are many ways of introducing slight variations in the working of this stitch. For instance, three successive rows may be worked all in the same direction and then three more in the reverse direction, which would result in a kind of chevron pattern, the successive rows of knots building up a pattern like that shown in fig. 24, which has been taken from an old sampler. The colour of the thread may vary with the

Fig. 24

direction of the stitch if the pattern is required to be still more emphatic, as was the case in the sampler referred to, where the stitch was used as the filling of a conventional flower. This chevron makes a very pretty background for a small fine piece of work such as a card case. Many other slight variations in the working would produce new results; the worker will probably experiment with some on her own account.

We will describe just one other variation which is a most satisfactory way of dealing with the stitch. It can be made to form an excellent centre to a flower by being worked in spiral lines commencing from the centre and working round and round until the disc is of the required size, just as illustrated in the upper diagram in fig. 25. The lower diagram

in the same figure shows the pattern which the knots build up when the stitch is worked in this spiral fashion. A centre to a daisy can most excellently be worked like this, using three shades of yellow; in fact the result is quite comically like the real thing. It is very easy, by means of a change of colour in the thread, to introduce either shading or distinct bands of contrasted colours, such as black and gold, in successive rings. These centres can be worked on the actual flower, or they can be worked on a temporary ground and fixed in the centre of the flower when completed, a neat hemming round the edge to the base of the petals being all that is necessary to keep them in position. To work one of these centres begin by making a single chain stitch on the material, then work the first circle of knots into this chain and then continue round and round until the shape is of the necessary size. If it is worked on a temporary ground, release it by cutting the threads of the ground material, and then attach it to the flower. In order to keep the surface flat whilst working it is necessary, as the circle grows in circumference, to now and then add an extra stitch, that is, two into one hole instead of one. This spiral method of working the stitch can occasionally be seen on old work employed for the head of a bird, the eye forming the central point from which it is worked.

Fig. 25

G. C.

PLATE VI. A CUSHION COVER WITH A CIRCULAR DESIGN OF A FLOWERING TULIP TREE

THE embroidered Cushion Cover reproduced in Plate VI is worked in "Mallard" floss silk on a coarse stone-coloured linen. The illustration is reduced in scale, the original circular design measuring $10\frac{1}{2}$ inches in diameter. The design is conventional, and is based upon the Tulip Tree, the forms being derived from an Indian pattern. The leaves are worked in grass greens and china blues. They are outlined in chain stitch, in the darker shade of each colour. The veins are done in the lighter tones of the blue and green in Roumanian stitch, worked openly so that the ground can be clearly seen between each stitch (see fig. 19 and the description, particularly the last paragraph). Care must be taken that the thread does not become untwisted, as an unsatisfactory effect will be produced if it is not kept tight. This can easily be avoided by turning the needle to the right occasionally as the thread is pulled out.

The berries are worked in dull gold in buttonhole stitch done in circular form, and small black French knots, made with three twists, divide these berries, thereby enriching the effect of the gold. The bunches of leaves are all worked in the same way, as an attractive simplicity is gained by such treatment. A little variety is introduced by the difference in the number of berries, which however are arranged with due regard to the even distribution of the colour.

Stem stitch (see Part I) is used for the tendrils, in two shades of dull gold. A single line of the darker shade outlines either edge, and the centre is filled in with the lighter colour. The number of lines varies according to the thickness of the tendril.

The main trunk is outlined with black in

chain stitch. Next to this are two rows of chain in the darker drab colour. The centre of the trunk is filled in with more rows of chain in the lighter shade of drab. The lesser branches, leading from the trunk to the leaves, are outlined with chain in black, and filled in with stem stitch in dark drab.

The border, which is intended to be carried all round the edge of the cushion, is composed of five of the silks used in the central design. This embroidered band round the cushion could be omitted and a cord sewn on instead if preferred. If it is used it should be placed right on the edge of the cushion, close to the joining of the front and back. But it would be still more effective if lines of it were worked one on either side of the join. The middle band of Roumanian stitch is made up of dark china blue and grass green, alternating with narrow zigzags of black. Of the former colour there are six stitches and of the black, three. Either side of this band is a chain-stitch line in the paler shade of grass green. On either side of these lines there is a variety of the chain, worked so as to form a "chevron" line (see the description on page 41). French knots, composed of three twists of silk, in the darker gold colour are introduced within each point to brighten the border.

An attractive material for working this cushion cover on would be Tussore silk, and when made up the edge might be bound with a coloured cord made from silks like those used in the design.

The following is an alternative scheme of colouring on this material:—The leaves might be executed in four shades of dull gold, and the berries in black, brightened by French

A CUSHION COVER.
(For particulars see page 60.)

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knots in red. The contrast of black and gold is always most effective. The stems, in that case, would look best in three dark shades of olive green,—the lighter shades of the same colour being used for the tendrils. The red should be introduced into the border, the width of which may be determined according to the taste of the embroideress.

The design is suitable for a wall pocket, or it might be adapted for a bed-spread or curtain, being repeated and placed at regular intervals, to form a "spot" pattern.

The following is a list of the quantities of each of the colours in "Mallard" Floss used in working the design:—

China Blue . . .	No. 180a	about 3 skeins.
" " . . .	No. 178	" 2 "
Grass Green. . .	No. 86	" 2 "
" " . . .	No. 84	" 2 "
Old Gold . . .	No. 103	" 2 "
" " . . .	No. 99	" 1 skein.
Drab . . .	No. 30b	" 2 skeins.
" . . .	No. 30d	" 1 skein.
Black . . .	No. 82	" 3 skeins.

(More would be required for working out the entire border.)

D. B. MARTIN.

DESIGNING—II. CONVENTIONAL FLORAL DESIGNS

BESIDES the naturalistic floral elements already described, floral work of another type is very largely used in embroidery designs. In this work the graceful elegance of growth, rich colouring, and most important general characteristics of plants are closely imitated, but the flowers used do not exactly represent individual specimens, or indeed actual species. The fact that a botanist would not be able to identify the particular flowers or foliage used in a design need not trouble the embroideress, for that in no way detracts from its decorative value. Study of the great schools of Design will furnish very many striking and beautiful examples of floral decoration which such a canon of criticism would condemn as irregular. The illustrations given in figs. 26 and 27, from two fine embroideries in the Victoria and Albert Museum, are examples of the kind of floral element in question. The first, from an eighteenth-century Persian cover, is repeated many times over the ground, set out in fairly close order. The second example, from an English hanging of about the same date, is repeated in order with two other sprigs of very similar design, forming a light, gaily coloured powdering of flowers over a white

linen ground. These are good examples of semi-naturalistic floral work, which has always been used in addition to forms carefully copied from nature.

Embroidery has a prominent place amongst the crafts which have been responsible for the introduction of new plants and flowers into the world of Art. The evolution of this semi-naturalistic flora is a very interesting study. Examination of old embroideries gathered from all parts of the world shows that each individual specimen, every flower and bud, is a development of some existing form, and is not an original creation, invented, as some appear to imagine that all designs are, upon the spur of the moment. All the fantastic and beautiful blossoms and leaves found decorating old embroideries have been the natural products of circumstances which have been at work, in all kinds of decoration, producing very similar results. It will be interesting to trace the development of some of these "conventional" floral forms, as they are called, for study of them, apart from its historical value, has a most direct bearing upon the everyday work of the designer, often enabling the worker to understand and appreciate results which though due to the

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working of decorative principles might be regarded as extravagant eccentricities.

The first stage towards purely conventional floral work is marked by those elements in which natural flowers are arranged in an unnatural way. The reason for this type of ornament is easy to understand; a few flowers of pleasant, contrasting colours are often found grafted on to a plant of another

of the border would naturally suggest vine, ivy or some creeping plant as foliage suitable for the scheme, but the effect of any of these, appropriate enough in some cases, would in others be much too heavy and monotonous. So the designer strips off the unnecessary leaves and grafts on little bunches of gay flowers that will suit the requirements of the case.

A certain amount of the modification of the forms in naturalistic floral designs is

Fig. 26

species, which without them would have rendered the design, of which it forms part, somewhat insipid and dull. In a familiar border scheme we find bunches of totally dissimilar flowers and leaves, which have absolutely no natural relation to one another, issuing in regular order from a stiffly designed waving line or central stem. This produces a very ornate design, common in embroideries. The waving central stem-line

Fig. 27

due to the difficulty of exactly representing them by means of needle and thread. The various materials and methods used in all kinds of decoration tend to introduce some degree of formalisation or simplification of detail into every design. Modifications of naturalistic drawing due to this cause are commonly found in all crafts; weaving, embroidery, carving and inlaying will each produce a characteristic rendering of the

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same original ; and in the same way each embroidery stitch will interpret a given design with a certain individuality. Formalisation has a tendency to increase as a design is passed from hand to hand and copied. The irregularities of growth, position and so forth, carefully imitated by the original worker and reproduced in the first few versions, are gradually eliminated as remembrance of the natural forms becomes less distinct. Difficult to understand and represent without reference to a model, they soon come to be rendered very imperfectly and regarded as defects of workmanship. The stimulus afforded by the desire of accurately representing nature, lost when actual contact with nature has been interrupted, is replaced by a desire to attain strict accuracy of workmanship, design, symmetry, and so forth.

There is no reason why one craftsman should not borrow the good things of another. It has been done continually in the past, with the happiest results ; for many designs have thus reaped the advantage of the concentrated thought of various groups of decorators instead of that of one group alone. The fine designs used jointly by the tile and pottery painters, silk weavers and embroiderers of Persia and Syria afford excellent examples in point. In the process of transferring a design from one craft to another conventionalisation proceeds at a much increased pace, since the formalised product of one set of tools and materials becomes the basis of a second similar modification. Designs so borrowed are sometimes deliberately adapted to new requirements. Carelessness in drawing and bad memory are two additional factors of great importance in producing new conventional elements, but the designer cannot be recommended to cultivate these expedients.

Designs formed of unnatural rearrangements of naturalistic foliage are easily contrived so long as the designer carefully explores and

makes use of the resources which Nature so lavishly provides. But, when a design requiring elements of the semi-naturalistic type is attempted, it is equally necessary to study the conventional flora which already exists. The notebook must contain sketches not only of flowers and leaves from the garden, but also of specimens from plates, tiles, woven and printed textiles. A set of

Fig. 28

highly formalised flowers drawn from the patterns of some ancient silk brocades is given in our final illustration (fig. 28). There is no need to attempt to produce elements of striking originality ; it is better to take those which present themselves and make intelligent use of them with such slight adaptations and changes as the necessities of new conditions demand.

A. H. CHRISTIE.

PLATE VII. A D'OYLEY EMBROIDERED WITH SPRIGS OF ESCHSCHOLTZIA

IN Plate VII an embroidered d'oyley is illustrated, the original being six and a half inches square. The flower represented is the rose and white Eschscholtzia ; so perhaps the colourings of the rest of the set might be chosen from other varieties of the same plant, such as the orange, pale yellow or carmine.

The basis of the design is simple. Four little cuttings of the flower are placed together in such a way that their main stems form a circle. From these stems spring slender stalks, each bearing a blossom which is supported on either side by a feathery leaf. The embroidery is executed on a fine white linen ground in "Filo-floss" silk in three shades of pink, two of green, two of brown, pale purple, black and white. The stitches used are stem, double back, chain (for which see Part I) and trellis (see fig. 23). A more delicate effect would be obtained if fine semi-transparent linen or batiste were used instead of the ordinary linen as illustrated. Such a material would make a very dainty d'oyley, but would be a little more difficult to work upon.

The flowers are worked in a stitch which has been descriptively named "Trellis." The reproduction scarcely does it full justice perhaps, for it is unusually attractive, and, strange to say, not nearly so difficult to execute as its appearance suggests, though it is rather a close stitch to work in a fine thread. The worker would be well advised to try to embroider the flower exactly in the same way as it is done in the colour plate, but in case she may not wish to attempt anything new, other methods are suggested further on.

To begin working one of the flowers, a strand of the deepest shade of pink is threaded

in a needle and doubled in halves. All the flowers and leaves in this example are carried out with a two-fold thread. The manipulation is often easier when a single thread is doubled than when two strands are threaded into the needle together. Each petal must first be outlined with chain stitch, in working which care must be taken that the material does not pucker, for when one is executing any small circular shape in chain it is very easy to draw up the material.

It is a good plan to outline all the sixteen petals before commencing any of the fillings, for the completed petals are then more likely to be of the same size. When these are finished, the fillings are the next process. Before working them to the directions, it is necessary for the worker to master the description of trellis stitch on page 39, and it may be well to carry out a simple trial piece with coarse thread as there suggested. To begin the filling, thread the needle with a double strand of the deepest shade of pink, and bring it through at the top left-hand corner of a petal, in the centre of one of the chain stitches. Work five rows of trellis stitch to and fro, alternately from left to right and from right to left. Next, in the medium shade of pink, work four more rows of the stitch, and then four more rows in the palest shade, allowing the lines to take a slight curve, as that will make the shading more pleasing and true to nature than if they were taken absolutely straight across. Fill in the remainder of the petal with the same stitch in pure white. Finally, in order to strengthen the edge, work a line of stem stitch in the deepest shade of pink round the outside of each petal. This, however, can be omitted at the worker's will. The centre of the flower has five French knots,

PLATE VII.

A D'OYLEY.

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in pale purple, arranged in the form of a cross. Outside these a small circle is worked in chain stitch in single black thread and, in order to give the requisite square shape to the centre, four single chain stitches in black are worked over the circular line, each one pointing towards a corner.

The feather-like leaves are worked in double back stitch with double thread in two shades of green, the central portion in the darker, and the branching outer portions in the lighter shade. The drawing of these forms should be refined and clear, for if they become at all clumsy the crisp character will be lost. This means that small neat stitches must be taken exactly on the traced lines. The main stem, which is the part forming the circle, is filled in with chain stitch in single thread. First the outlines are worked in black, very close against them on either side, a line of chain is run in brown, and along the centre a line of the pale shade of brown. The flower stalk is first outlined in chain stitch in the darker green; its centre is then filled in with double back stitch, using the darker brown towards the base and the lighter brown near the flower.

The d'oyley is finished off round the edges with a simple fringe, made by fraying out the material of the ground. At the base of

the fringe a line of stitching is worked in order to secure the frayed edge and to draw the fringe into little detached bunches. This process, which should be carried out before the fringe is cut and when only a few warp threads have been withdrawn, will be familiar to any one who knows the simplest drawn thread work.

Some alternative methods of working the flower petals would be (a) to execute them in shaded crewel stitch, in the way sometimes called "painting with the needle." (b) They might be worked in distinct bands of satin stitch in successive shades of colour. (c) They might be carried out in chain stitch, in concentric lines gradually becoming lighter towards the centre. As an alternative silk Filoselle can replace the "Filo-Floss," if preferred. "Stout Floss" silk might well be substituted; in fact the prettiest effect of all would be obtained by working in that make upon fine batiste.

The silks used in carrying out the d'oyley are as follows:—

Pinks	.	Nos. 163h, 163d, 163b,	about 1 skein of each.
Greens	.	Nos. 178e, 178d.	. " I " " "
Browns	.	Nos. 123, 124	. " I " " "
Purple	.	No. 120	. " 1 skein.
White	.	No. 177	. " I "
Black	.	No. 178	. " I "

G. C.

THE USE OF PRECIOUS STONES IN EMBROIDERY

THAT the craft of the Jeweller and of the Embroiderer have in the past sometimes been intimately connected is well known to those versed in the history of art. In the earliest times the art of embroidery was indebted to the goldsmith for the manufacture of gold thread, precious not only for its intrinsic value, but also for the decorative resources that it opened up. It has been suggested

that it is to the association between the two crafts that the early embroidery was indebted for many goldsmith-like details of design. Until the seventeenth century it was a fairly common practice to add precious stones as enrichment to embroideries for either lay or ecclesiastical use. From that time the use of jewels became less frequent, and to-day it may be said scarcely to exist. This is to be regretted, as

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there can be no doubt of their fitness for the purpose, as long as it is remembered that they need setting in suitable surroundings, such as are given by gold, silver, and fine wrought silk.

It was not customary to use stones only of first-rate quality. In some of the finest old examples pretty little pieces of coloured stone, mounted in silver-gilt settings, were placed in important positions in the work. The Orientals make frequent use of small pieces of looking-glass, and other equally simple devices, to obtain a brilliant effect. Modern workers will find beads a pretty and inexpensive form of this kind of decoration. They can be obtained of many sorts, colours and sizes, and they may be used for tassels, fringes, edgings of all kinds, and sometimes, in carefully chosen portions of the embroidery. Bead work is well known as a craft in itself, but not so well perhaps in conjunction with other work.

The few existing examples of embroidery enriched with precious stones, although mostly in a mutilated condition, show clearly what beautiful results these two crafts achieved in combination. Amongst such pieces we may mention Archbishop Walter's sandals, of thirteenth-century date, which were discovered a few years ago in his tomb at Canterbury in an excellent state of preservation. They were decorated with carbuncles and amethysts set in a lovely embroidered pattern of dragons, birds, lions, and beautiful little geometrical forms, most delicately wrought in gold thread. The famous red velvet cope, of fourteenth-century English work, belonging to Colonel Butler Bowdon, has still some of the pearls remaining with which it was once lavishly ornamented. Fig. 29, a detail taken from it, shows a grotesque lion's head and some acorns, both composed of pearls. The fantastic, stem-like columns to which they are attached occur at frequent intervals all over the cope, forming the dividing lines between the many figures and subjects worked

upon it. Again, each of the twenty-six angels in the spandrels holds a star made of pearls.

In the two foregoing examples the precious stones are fixed by stitching, but in other cases embroidery called to its aid the elaborate settings of the jeweller's art. A

Fig. 29

good illustration of this can be seen in a mitre in the possession of New College, Oxford, left to it by the founder, Bishop William of Wykeham, who died in 1360. Although mutilated, this is still a very fine example of jewelled embroidery. Fig. 30 is an outline drawing of the front of the mitre showing the main plan of the design. The

central band running down the front is decorated with jewels set in a guilloche of pearls. Either side of the band filling up the space around a large central jewel, runs a scroll pattern embroidered in silver thread, whilst the surrounding ground is filled in with strings of pearls. This pattern is omitted in the outline drawing, but a fragment of it is illustrated in fig. 31. Round the base of the mitre runs a double band of enamelled and jewelled tablets, between which are detached

Fig. 30

jewels. Each tablet in the band is neatly hinged to the adjoining one in order to allow the mitre to take the necessary rounded shape. Fig. 32 shows a small portion of this band. In it can be seen five of the enamels, which are of wonderful colour and workmanship. They nearly all differ in subject, but each contains an animal placed against a background of foliage. The other tablets are composed of cut stones neatly mounted and, in some cases, framed in pearls.

The number of surviving examples is

very small, when compared to the enormous quantity that must have been in existence at one time or another. It is sometimes difficult to believe that the accounts of them are not exaggerated; to the sober-clad twentieth century they read almost like the fairy stories of the *Arabian Nights*. It is literally true however that in the great days of jewel-embroidered garments, a notable personage might be gorgeous with jewels from the crown of his head to the sole of his feet. Plate 36 in M. de Farcy's interesting collection of reproductions of Embroidery, shows a pair of bishop's sandals, decorated with gems and pearls on the soles as well as on the upper parts.

The principal cause of the destruction of these works of art was the value of the precious materials. At times the gems were only cut away from the work, which was itself left fairly intact. Such was the case with the Ascoli-Piceno cope, which though now entirely bare, was once richly decorated with pearls. Unfortunately it was more usual first to remove the valuable stones, and then burn the embroideries, in order to reclaim the gold that had been stitched upon them at the cost of years of labour. Another reason for their destruction was their impracticability. Abbots, grand lords and ladies literally succumbed beneath the weight of garments covered with precious stones and plates of gold. In 1606 Marie de Médicis wore at a royal baptism, a robe decorated with 3,200 pearls, and 3,000 diamonds, and we are not surprised to learn that she never put it on a second time. The chasuble given by Geoffrey, sixteenth Abbot of St. Albans, to his monastery in the twelfth century, was so covered with stones and plates of gold that it was burnt by his successor because of its fatiguing weight. An inventory of a Spanish lady's wardrobe supplies a rather comical reason for the despoliation of her pearl-enriched robe. One large button of Moorish pearl work was noted down as missing; this, says the

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inventory, was ground into a potion for the said duchess when she was sick.*

Pearls, being more plentiful, were naturally used in greater quantities than rarer stones. Oriental and Scottish pearls were considered of most value. The seed pearls were sold by weight, the larger ones by the hundred, and the largest at so much per pearl. In inventories they are described in this way: such and such a garment had so many "counted" pearls on it, and so on. They were applied to the embroidery in all kinds of ways. Sometimes seed pearls were used to fill in a background, as in William of Wykeham's mitre; at other times strings of pearls were stitched down to outline a pattern, a nimbus of a saint, or a fold of drapery. Elsewhere they were used to cover solidly some portion of the design. We read in the description of a fourteenth-century doublet,† belonging to the Duke of Burgundy, that it was made of red velvet

Fig. 31

garnished with many pieces of worked gold, cut in shapes of lozenges and squares. For further decoration it had embroidered upon it forty sheep and forty swans composed of

pearls. Each sheep had a bell hanging round its neck, and each swan held one in its beak. It had also upon it seventy-eight flowers of gold enamelled with red. This

Fig. 32

was worn on the occasion of a grand regal procession. Another duke of musical tastes had a wonderful garment, also decorated with pearls, but in a different way. It is mentioned in the inventory of Charles VI. as belonging to Charles, Duke of Orleans. The sleeves were embroidered up and down with the words and music of the chanson *Madame, je suis plus joyeux*. Each musical note was composed of four pearls stitched down close together, so as to form a tiny square. This entailed the use of 568 pearls for the 142 notes of the song.

We have not discussed the use of precious stones in Oriental Embroidery, but the European employment of jewellery in this manner is derived from the East. Where the West has used jewels in twos and threes, the East has literally covered embroideries with the rarest gems. From Persia have emanated the most gorgeous specimens of jewelled embroideries. To give one example, we will quote the description‡ of a wonderful jewelled carpet, that was taken by the Arabs in the pillage of the White Palace of Khosroes after the defeat of the Persians at Cadesia (A.D. 637).

* L. Williams: "The Arts and Crafts of Older Spain."

† M. de Farcy: "La Broderie du onzième siècle jusqu'à nos jours."

‡ "History of Arabia, Ancient and Modern," by Andrew Crichton.

“One article in this prodigious booty, before which all others seemed to recede in comparison, was the superb and celebrated carpet of silk and gold cloth, sixty cubits in length and as many in breadth, which decorated one of the apartments of the palace. It was wrought into a paradise or garden, with jewels of the most curious and costly species: the ruby, the emerald, the sapphire, the beryl, topaz, and pearl, being arranged with such consummate skill as to represent, in beautiful mosaic, trees, fruits and flowers, rivulets and fountains: roses and shrubs of every description seemed to combine their fragrance and their foliage to charm the senses of the beholders. This piece of exquisite luxury and illusion, to which the

Persians gave the name of Baharistan, or the Mansion of Perpetual Spring, was an invention employed by their monarchs as an artificial substitute for that loveliest of seasons. During the gloom of winter they were accustomed to regale the nobles of their court on this magnificent embroidery, where art had supplied the absence of nature, and wherein the guests might trace a brilliant imitation of her faded beauties in the variegated colours of the jewelled and pictured floor.”

The ultimate fate of this work of art was that it was cut up into small pieces and divided amongst the conquerors, in spite of an effort being made to save it for the sake of its marvellous beauty. G. C.

PLATE VIII. A BLOTTER WITH A SPRAY OF YELLOW FLOWERS

THE design illustrated in Plate VIII is intended for a blotter. The size of the original is eleven inches by nine inches, the measurements being taken from the outer edges of the embroidered border. The ground material is dark blue linen, and the work is carried out in Twisted Embroidery Silk. The colour scheme includes three yellows, lemon and two shades of orange, three shades of green, a sepia brown and a deep purple. The stitches employed are stem, satin, double back and chain, all of which were described and illustrated in Part I. These four are all easily executed, although the last two are not in quite such everyday use as the first two. There are, however, many other stitches quite as simple as satin and chain, and the variety obtained by using them is distinctly advantageous both from the point of view of greater interest in the working and the result when finished. Double back stitch, for instance, can frequently replace satin; it is easier and more quickly executed, for it need not be worked

so closely, and it is more economical, as there is less silk upon the under surface than with satin stitch.

The petals of the flowers are all filled with double back stitch in a pale lemon yellow. Four of the flowers are outlined with the same colour in stem stitch, the rest in the paler shade of orange. In the centre of each open flower is a large purple French knot, made with three twists of silk upon the needle. The flowers shown in profile are worked exactly like the others, but have two of the French knots instead of only one. The outlines of the flowers must be worked very close up to the filling, and small stitches must be taken. The thread should be kept to the right-hand side of the needle, and the point of each petal emphasised by a slightly longer stitch. The leaves also are outlined with stem stitch, but with the thread placed on the left-hand side of the needle. In order to obtain the serrated edge, the needle must pick up the material rather more obliquely than usual. With the leaves the

outline is worked first, in the middle shade of green, and the filling afterwards in satin stitch in the palest shade of the same colour.

The buds are worked in satin stitch in the deeper shade of orange; the calyces of the buds, worked in the deepest shade of green, consist each of two single detached chain stitches. Fig. 33 illustrates some detached chain stitches. They are commenced in the usual way, and then, instead of continuing with a second stitch, the thread is taken through to the back over the loop just formed, thus securing it. In working these buds, each stitch begins from the base and takes a slightly outward direction, and the tying-down stitch, made perhaps a little longer than is actually necessary, then slopes inwards towards the little orange bud, thus making the form of the calyx more like a sheath wrapped round the bud. The stems are worked in ordinary stem stitch in two colours, brown and the deepest shade of green. The two colours are worked in lines close beside each other until the first flower stalk springs off and marks the point for continuing the brown colour alone in a single line. The five larger leaves at the base, those from which the spray springs, are worked as follows: the fillings in double back stitch in the lightest green, the outlines in stem stitch in the medium shade, and the lower part of the reflexed leaves in satin stitch in brown. The small triangular shape at the base, suggesting the earth, is worked in close lines of stem stitch in dark green and purple alternately.

Fig. 33

The border is worked entirely in chain stitch or, to be more accurate, in variations of it. The small trefoils of deep orange colour, that repeat all round the border, are each composed of three single detached chain stitches (see fig. 33), each commencing from the same centre and pointing outwards. The chevron line, of chequered green and purple, that runs round the

border and separates the trefoils, is worked very similarly to the ordinary chain, and is known as "chequered chain." In order to give it the chequer pattern, two strands of silk, a dark green and a purple, must be threaded into the needle together. Begin working exactly as for the ordinary chain stitch until the moment of pulling the needle through over the loop of thread is reached. In the present case the needle will be in the act of passing over two threads; remove one of them, say the green, from under the needle and let it lie on top, or be thrown to one side (see fig. 34). Now draw the needle through over the remaining purple thread and the result will be that a chain stitch, in the purple colour, will have been formed. If at the starting point some of the green shows, it can easily be removed by pulling the green thread. For the next stitch, allow only the green

Fig. 34

thread to remain looped under the needle, and place the purple aside out of the way, which will make the second stitch a green one. This course, if continued, works the chain in a chequering of green and purple. With this particular border an extra long, green stitch should always be taken at the points of the chevron. A large needle should be used, as the two-fold thread is thick, and the thumb of the left hand should be placed over the stitch, whilst the worker pulls the thread through, in order to prevent any troublesome tangling of the thread.

This design or colour scheme might be worked upon either white or unbleached linen. If, with this alteration in the colour of the ground, the border appeared a little heavy, paler shades of the same colours could

PLATE VIII.

A BLOTTER.
(For particulars see page 60.)

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be substituted. The flowers and leaves may be of other colours, though the flower here is based on the yellow St. John's Wort. As an alternative silk "Mallard" floss may be used.

The yellow flower spray could, by leaving out the border, be applied to a variety of other objects such as a work bag, handkerchief and glove case, small cushions and many other small objects that would be brightened up by a little embroidery; or it could be repeated, with others built up on a similar plan, at intervals over a hanging, with a border based on the same plan as this one. Being so much larger, the border would need to be made more interesting; the chevron could be developed into a decorated band, and a flower or leaf sprig might be used instead of the trefoil.

To arrange other sprays on the same basis as the one illustrated is very simple; all that is necessary is to substitute other suitable flowers and leaves upon the same stems and base.

If the worker wishes to decorate the back as well as the front of the blotter, the Michaelmas Daisy might be used instead of the St. John's Wort, but the same border should be used upon both sides.

The Twisted Embroidery Silks required for carrying out this design are as follows:—

Greens	. No. 178g .	. about 2 skeins.
"	. Nos. 178d, 178e .	. 1 skein of each.
Yellows	. Nos. 156, 91 .	. " 1 " " "
"	. No. 156a .	. " 2 skeins.
Brown	. No. 537 .	. " 1 skein.
Purple	. No. 41g .	. " 2 skeins.

G. C.

SILK—II. THE MANUFACTURE OF NET AND SPUN SILK

A. "NET" SILK

WITH the completion of the cocoon the caterpillar, the original maker of all silk, passes from our view. The creature is, in fact, painlessly killed to prevent his destroying the valuable thread with which he has surrounded himself. The necessity for keeping our descriptions intelligible prevents our doing full justice to the intricacy and delicacy of the process of Silk Manufacture; but, before proceeding to describe them, we may just summarise one or two of the special characteristics of the thread which have by now revealed themselves. The embroideress then should bear in mind that in using any ordinary embroidery silk, she is working with from one hundred to eleven hundred ends of the original thread as it leaves the cocoon. Presumably she wishes to exhibit the full beauty and nature of her material, which has a decorative value of its own quite apart from the added qualities of design and colour. The intrinsic

beauty of silk lies in these two qualities, the power which it has of reflecting light, which we call lustre, and its supple smoothness. They depend upon what is known as the parallelism of the fibres, or, in other words, upon the fact that all the minutely fine strands which are united in the composite thread, lie evenly, side by side, with little or no twist upon them. The more skilled the worker, the less twist will she need upon the silk she uses, and the more careful she will be to keep it flat and smooth on the material.

The first step in manufacture, known as "reeling," consists in unwinding the silk from the cocoon into a skein. For this purpose a given number of cocoons, varying from four to ten or twelve, according to the size of thread that is required, are placed together in a basin of warm water, and are whisked about with a brush until the gum is softened and the end of the thread can be found. The coarse outer portion is then reeled off and thrown aside as waste, until

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the true fine thread is reached, which continues for about eleven hundred yards, after which point it becomes too fine to be unwound. When the ends of all the cocoons have been found, they are given a twist with the fingers to make them adhere, and are so gathered up on to a slowly revolving wheel. After the skein on the wheel has reached a certain size it is taken off, and is ready to be packed in bales for shipment. How tedious this "reeling" is may be imagined from the fact that it takes the product of over two thousand cocoons to make one pound of silk. This first stage of manufacture is almost invariably conducted in the same country or locality as the silk is grown in.

The next process is known as throwing, and comprises all the various stages by which the reeler's skein is transformed into a yarn ready for dyeing. Silk throwing, once a prosperous trade in this country, has fallen on evil days, and is now carried on almost solely on the Continent, so far as the European trade is concerned. By some the cause of this decline is ascribed to the competition of labour which is alleged to be sweated, and to the absence of a protective duty. Part of the decline may be due to these causes, but those who can view the subject with a more impartial eye are inclined to assign it to more natural reasons, namely the apathy of silk throwsters during the period when the first onslaught of foreign competition was felt after the removal of the duty in 1860; to the difficulties of climate; and to the tendency, which may be observed in all modern industry, to simplify manufacture by combining the initial stages, as far as possible, in the country where the raw material originates. However that may be, all are agreed in lamenting the gradual disappearance of the old silk mills. The industry is on the whole an admirable employment for girls and women, involving neither great physical fatigue, nor extremes of heat, cold, or moisture; and if it be at times irritating to the point of distraction,

even that may be not a bad discipline for the temper.

For the skein of raw silk, as exported from China, when it is put on to the "swifts" or skeleton wheels, for the first winding process, is a skein in name only, and besides containing the "gouts" and "nib" to which we referred in our first article, is so full of very fine portions and loose ends that it will seldom run for many minutes without breaking. Once the thread is broken, and the end lost, it is no easy task to find it again, and although an expert may do so in less than a minute, it might take an amateur ten minutes or more, if indeed he ever succeeded in finding it at all. An industrious winder can only look after some twenty skeins at a time, and the product of a day's work, even on a good class of silk, is only about twenty-five ounces. But once the silk is safely cleaned and on the bobbin in a continuous length, the remaining stages of "doubling," "spinning," and "throwing" are much more rapid and simple.

Doubling consists in rewinding any number of ends together from the first winding bobbins to produce a multifold cord of the required size. An embroidery silk usually consists of two such cords, a machine silk of three, a knitting silk of from two to eight, and a floss of a single cord slightly twisted. It is a process requiring considerable care in order to prevent a single end breaking, and so dropping out, and to ensure an even tension, which is essential if a loopy and irregular silk is to be avoided. This multifold cord has next to be twisted or "spun." It makes little difference whether the spin is from right to left, or *vice versa*, but the spin on the single cord must be in the opposite direction to that in which it is to be twisted together with one or more others. The last process consists in again twisting up the single spun cords into a two, three, or four ply yarn, which has then only to be reeled back into skeins when it is ready for dyeing.

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Such, simply stated, is the complete process of silk throwing. We may leave the consideration of net silk at this point, until we come to the subject of dyeing and finishing in our last article. At this stage it resembles an ordinary, very stiff white string without lustre, or any other special beauty. It would surprise many people to see the almost endless varieties of size and throw which the manufacturer is called upon to produce, by reason of the many uses to which silk is put. To take one class of consumer only, the everyday outdoor attire of a lady in the twentieth century usually comprises silk in at least a dozen different forms. Her boots or shoes are sewn with machine closing and buttonholed with spun machine twist. Any silk garments she wears are woven with organzine for a warp, and tram for weft. Her stockings are clocked with chevoning floss, her dress is buttonholed with Legee, her blouse tucked or hemmed with spun machine twist and probably spotted with embroidery silk. The flowers in her hat have the stems lapped with flower floss. Her gloves are decorated with tambour and sewn with fine super machine twist.

B. SPUN SILK

It is scarcely necessary to say that the many processes which we have so far described incidentally involve the creation of a large amount of waste. The usual estimate is that for every pound of thrown net silk produced, an equal, or larger quantity of waste is made, which becomes in turn the raw material of a separate industry, the manufacture of "Spun Silk." It is pleasant to turn to the subject of silk spinning, as it offers a picture in complete contrast to the distressed throwing industry, since it is not only a flourishing trade in this country, but one in which Englishmen have always held the first position as inventors and manufacturers, ever since its rise.

The waste which reaches this country includes many different kinds. There is what may be called the silkworm's own waste, known as "blaze," consisting of pierced and faulty cocoons, the coarse *bourre de soie* and the inner wrapping of the cocoon which, as we saw, is too fine to wind. Then there is the reeler's waste, which has often been thrown wet on the floor, and there been trampled upon till it mats into a solid lump. Lastly, there is throwing waste, which includes all that made in the mills in winding and spinning the silk. It is hardly too much to say of waste generally—though there are exceptions to this—that it reaches the spinner in a state in which an ordinary individual would have considerable hesitation in touching it at all, unless to throw it into the fire, whilst it leaves him transformed into a lustrous, cream-white thread, almost as silky and beautiful as the real thing.

The first process in silk spinning is to discharge the natural "gum" or "sericin," with which, as was pointed out in Part I, the silkworm has protected and waterproofed the thread, and which constitutes from twenty to twenty-seven per cent. of its total weight. English spinners usually discharge their waste by putting it into bags which hold about a pound each, and boiling a hundred or so of them at a time for an hour and a half in a solution of soap and water.

The operation is repeated twice, the bags of silk being dried in the interval between the first and second boiling. At the same time as the gum is thus discharged, most of the dirt and some of the other impurities are got rid of, allowing the natural softness and lustre of the silk to appear. When it has been finally dried, it is carefully searched for the kind of impurities which boiling would not remove. They vary with the kind of waste treated, and include pieces of cocoon, leaves, twigs, hairs, paper, cigarette ends and even nails and pieces of iron; in fact a collection of such sweepings as would be found on the floor of the cottage in the

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distant land where it was reeled, or in the mill where it was thrown.

At this point it is still a mere mass of tangled and knotted fibres, and the object of the dressing stage is to straighten it out, until it reaches something like the appearance and consistency of a sheet of cotton-wool. This is done by feeding the waste on to a large drum which revolves at a high speed, and the surface of which is covered with fine, close-set steel teeth. The teeth grip the silk and straighten it out, while any remaining pieces of cocoon, etc., fall out. When the teeth are full, the silk, now called a "lap," is cut at one point and stripped off in a continuous sheet, just as long as the circumference of the drum. The second process, called "filling," is similar to the last, but has a further object, namely to begin sorting out the different lengths of fibre, which vary, in the first state, from half an inch to a yard in length. So the "lap" is again fed on to a revolving drum, which in this case has the rows of teeth about eight inches apart; but this time, when the drum is full, instead of cutting the lap on it *at one point*, and stripping it off in a continuous length, it is cut *between each row* of teeth, leaving a thick tuft or fringe, some seven inches long, hanging on the row. The operator then grips the tufts firmly between the edges of a hinged board, called a "book-board," and so pulls it off the teeth.

The process of dressing proper, which comes next, cannot be adequately described in a short space. It suffices to say that the portion of the silk which projects between the edges of the bookboard is mechanically "combed" until all the shorter fibres are dragged out on to the teeth of the combs, and those remaining are at last all practically of one length, clean and parallel. After the projecting fringe has thus been combed, it is in turn gripped by another bookboard, and the portion which was between the boards in the first instance is subjected to the same

process. The waste is now termed a "first draft." All the fibres that have been combed out are subsequently removed from the teeth of the combs and put through the same routine, the length of the fibre growing shorter with each repetition, until six or seven "drafts" have been formed.

The various drafts are kept separate, and have next to be restored to the form of a continuous thin film, some eight or ten inches wide, by the processes of "spreading" and "drawing." These processes are similar to those by which the "lap" was first made, except that it is gradually drawn out thinner and thinner by means of the receiving pins dragging at it faster than it is fed to them, and by its being pressed between iron rollers, until it at length emerges like a narrow silver ribbon, called a "sliver."

So the waste, having been torn, cut, combed and pressed times innumerable, is at length beginning to resume the form of a continuous, even thread. We need not follow it through the processes of roving, doubling and twisting, as they have been already sufficiently described in dealing with thrown silk. Though they naturally differ technically from the treatment given to net silk, the principle is the same throughout.

Whilst the final product is of course not equal to a net silk, it is remarkable how good a spun-silk yarn may be, the very waste of silk being superior to the prime product of any other textile thread. The price is from a third to a half that of net silk. The two can easily be distinguished by the ease with which the fibres fall apart. If the single thread of a spun silk is untwisted and pulled apart, it will be found that the fibres, being only some six inches in length at the most, will pull out without disturbing the rest; but if a net silk is treated in the same way, and the single end is drawn, the whole length writhes and cockles, showing that the true long staple is there.

H. W. R.

A CHILD'S FROCK, ITALIAN OR FRENCH, EIGHTEENTH CENTURY.

A CHILD'S FROCK

IT sometimes happens that a design which has been made for one object, and by chance getting put to a use absolutely foreign to its first intention, is most charmingly appropriate to its new office. Such is the case with the child's frock illustrated in the frontispiece, for what was once without doubt intended for the decoration of a valance has been turned to very good account as material for a little girl's embroidered dress. The original border design can be seen in its complete form composing the lower half of the skirt. To this, in order to make the dress of the requisite length, has adroitly been joined another strip of the border, the pattern being carefully arranged so that the important parts of it recur in regular lines up and down. A definite band of stitching hides the join, and a portion of the narrow edging appearing just above this line has been carefully unpicked in order to prevent the original use of the material being too apparent. A close comparison between the narrow border at the base and the border above the join shows that these two are in reality of the same design, but that the upper border has been partly obliterated. A third

piece of the broad border does service as bodice, and this time the narrow edging is dispensed with altogether. The sleeves are decorated with little sprigs, probably gleaned from the cut-to-waste pieces of the material. It is perhaps a pity that there was not a little more embroidery to spare for them.

Upon a soft cream muslin ground the light and graceful pattern is embroidered in two shades of tightly twisted indigo-blue silk. The darker shade of the two largely predominates, the lighter being used only here and there for such parts as the open fillings of the flowers, and so on. In addition to the silk thread there is a fairly generous use of fine gold tambour, which, owing to much use and washing, has faded to a dead gold colour, not at all unpleasing. Most of the pattern is outlined with this fine gold thread, and occasionally half a leaf is solidly filled in with it. The whole of the work is in chain stitch, excepting the stitching on of the tiny gold spangles which are freely used and greatly add to the effect. They sometimes have a circle of chain in gold tambour enclosing them, a rather unusual and pretty device.

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The work is probably Italian or French of the early eighteenth century. The evidence that it was bought at Piacenza rather tends to prove its Italian origin, but, in any case, the design shows strong Eastern influence.

The decoration of children's dress is a subject that the embroideress may well take up, even if she is not a skilled dressmaker. It is almost certain to be suitable, and a child's is a very different undertaking from an adult's dress. The cutting out is comparatively simple; the style, too, is prettiest when simple, and so the embroideress has only to think of a pretty decoration for a frock that perhaps just hangs loose from the yoke downwards. With adult dress many more questions come in; the cut and

style are more complicated and more important than the surface decoration. Anything in the nature of serious embroidery upon it has often to be designed with special reference to these considerations, which make the embroidering of a grown-up person's dress a much more intricate matter.

The dress in the frontispiece is about the right size for a child of six. It might easily be an English frock of the Gainsborough period (the same date as the embroidery), when children, at all events in pictures, wore dresses down to their toes. No matter what its origin or intention may have been, it provides us with a delightfully dainty and graceful example of decoration for children's dress.

G. C.

STITCHES—III

CORAL STITCH—CRETAN STITCH—PLAITED BRAID STITCH

BEFORE entering upon the explanation of the three stitches to be described in this number, we should like to complain against the existing too universal use of satin stitch. With it for fillings, and stem stitch for all necessary line work, the embroideress seems often quite content, whereas there are many others at her service possibly more suitable, often easier in execution, and more interesting. Variety in the stitching is an advantage at times; it pleasantly relieves the monotony of working, besides adding new interest to the finished work. On the other hand, there are many occasions when monotony of stitch is essential to the beauty of a piece of work. If one stitch, however, were to be chosen out above all others for universal employment, it would be chain. There is no need to enter upon its praises now, but either for broad effects or most exquisite drawing of detail it has

no rival. At this moment we are simply advocating, for ordinary embroidery purposes, the employment of a greater variety of stitch.

The three described below are Coral, Cretan, and Plaited Braid. The first is a decorative line stitch particularly easy and quick in execution. It can be seen in use upon the stems and offshoots of the cornflower design in Plate XII. Cretan, the second, is one of the well-known Eastern stitches, very useful for all kinds of fillings as well as for border-lines. (In Plate X it has been used for the bright-green fillings of the rose-leaves.) Plaited Braid, the third stitch, is one of the more complicated varieties. It was noticed in the description of the embroidered jacket in Part I as being employed for all the stems in that piece of work. It is particularly decorative, and shows to greatest advantage when worked in metal thread.

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CORAL STITCH

Coral belongs to the group of knotted stitches, and it is specially useful for any feathery or fern-like foliage, or for the veining of leaves when all that is required is a light open filling. Fig. 35 illustrates it being used in this last-mentioned way. It is composed of a simple knot, made and fixed to the material at the same moment. The knots can be placed so close together

Fig. 35

as almost to touch, or they can be spaced a little apart as in the illustration. To work it, bring the thread through to the front at the required point, and hold it down upon the material with the thumb of the left hand, on the traced line, a little to the left of the point where it came through (A in diagram). Then insert the needle, as in the illustration, and draw it through over the working thread. When forming the stitch, as little as possible of the ground material should be taken up. To make a closely

knotted line, the needle, for each succeeding stitch, should be inserted as near as possible to the knot last made. If the line is required more open, the knots can be spaced as much as an eighth of an inch apart.

CRETAN STITCH

Cretan, a stitch that has the appearance of a broad plait, can, like many others of this order, vary in width according to the shape

Fig. 36

of the space it is used to fill. It therefore makes a useful filling for leaves or petals of flowers. Most people are familiar with the characteristic embroideries coming from the island of Crete, which are frequently carried out entirely in it, whence probably the name. It is, however, commonly used upon Turkish and other work. Fig. 36 illustrates the stitch carrying out a leaf-filling. In this example the curved point of the leaf is commenced in stem stitch, gradually

merging first into Roumanian, and, when the leaf is wide enough, into Cretan; it is quite simple to change from one to the other. To work Cretan stitch, as in the illustration, the needle brings the thread through the material a little to one side of the central-vein line (see the loose thread in the diagram). The needle then picks up a piece of material on the opposite side of the leaf, just as is in process in the diagram, and brings the thread through again a little on the other side of the central vein and over the working thread, so that this last remains on the underside of the thread that has come through. For the next stitch the same process is repeated on the opposite side, and so it is continued, alternately on either side, until the filling is completed. The main variation in the working of this stitch lies in the proportionate size of the central part of the plait to the outer part; sometimes the centre is the wider and sometimes the outer, as in the present illustration. If a wide plait is wanted down the centre, only a small piece of material must be picked up by the needle; if the central plait is to be narrow, a larger piece must be picked up, which necessarily brings the thread out nearer to the central line, and so makes the middle portion narrower.

PLAITED BRAID STITCH

As this stitch has a rather complicated appearance and is perhaps not so simple as some, a particularly detailed diagram has been drawn. The worker may find that to learn it from the diagram (fig. 37) is the simplest way to master it. Five successive stitches are there depicted; after working the fifth (if the method is not by then completely learned) it is only necessary to glance at stage number four for information about the succeeding stitch, and then to continue to repeat the two last stages in alternation. To begin working, bring the needle through on the left-hand side of the

proposed band of stitching. Pass the thread under itself so as to form a loop on the surface of the material; then insert the

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needle in the centre of this loop, bring it through on the outside of it, and pull the thread through over the working thread (all this is shown in the diagram in stage one). For the next development the needle passes the thread under the two threads that cross on the surface (see diagram, stage two), but it does not enter the material at all this time. For the third movement the needle both enters the material and comes out again in the centre of the loops, exactly as illustrated in stage three of the diagram. For the fourth stitch the needle passes the thread only under the crossed threads on the surface, and again does not enter the material; in fact it is simply a repetition of stage two. Stage five is a repetition of stage three, and needs no further description. It will be seen that there are in reality only two different movements, and that they occur in alternation. The needle passes the thread in a horizontal direction, alternately, either under the crossed threads or through the loops and the material. Upon the back of the

material there should be a row of horizontal stitches equally spaced apart and of the same size. At first it is fairly easy to make a mistake and bring the thread through the wrong loops, but a careful comparison of the working with the explanatory diagram will keep the embroideress straight. The other points to be careful with are to leave the loops sufficiently loose to be practicable, and to pick up just the same amount of material each time. The stitch should be worked with coarse thread, and is perhaps most easily manipulated with metal thread. It is most often seen in old work executed in gold thread, and it is certainly particularly suited to it both from a practical and a decorative point of view. A large proportion of the thread is on the surface compared to what is underneath, which, from an economical aspect, is important with expensive material. It is also not wise to draw metal thread to and fro through stuffs more than can be helped, and with this stitch there is the minimum amount of it.

G. C.

PLATE IX. A CONVENTIONAL FLORAL SPRAY

PLATE IX illustrates a conventional flower sprig embroidered in delicate coloured silks. It is intended for use either on the centre of a small cushion, or on a large cushion, repeated four times and placed cornerwise, as in the accompanying illustration (see fig. 38). The reproduction is nearly the same size as the original.

The work is executed in Stout Floss, on a loosely woven linen. If any difficulty is experienced in manipulating Stout Floss, "Filo-Floss" may be substituted, as the colours, even to the numbering of them, are exactly the same, and "Filo-Floss" can be used either single or double, as requirements may demand. For the greater part of this piece of work, the floss silk is split in half; for the rest, it is used just as it unwinds

off the reel. There is no great difficulty in splitting the floss silk in half, for there is a natural division in the silk, which allows it to come apart easily; when dividing it into six or eight, as is necessary for fine work, some difficulty is experienced and it needs a practised hand.

The stitches used to work out the spray are chain, double back, and French knots, all of which were illustrated and described in Part I; also trellis, for which see Part II, figs. 23 and 24, and the accompanying description. Comprised in the colour scheme are three shades of soft blue, three of pink, three of myrtle green, two of dull green, one each of buff yellow, black, and greenish blue.

The petals of the flowers are worked in

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chain stitch in three shades of soft blue, and with the floss silk split in half (the floss is split thus whenever chain is employed). The coloured illustration explains

up the centre, and then the part between. This is the invariable order with fillings of this kind, for if such parts as outlines are not done first there is a danger of inaccurate

Fig. 38

fairly clearly the direction of the stitching and the arrangement of the different shades of colour.

The outlining of each petal, in the darkest blue, is carried out first, then the dark vein

drawing. The petals are completed by a double line of chain in the darkest blue along the base, in order to make a clear division between petals and centre.

The calyces should be worked next, for

A FLORAL SPRAY.
(For particulars see page 86.)

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the centre is better done when all the surroundings are complete. They are outlined in the middle shade of myrtle green, and then filled in with double back in the paler of the two shades of dull green, the floss for this filling stitch not being divided at all.

In the illustration, the centres of the flowers are worked in trellis stitch, which was described in detail in Part II. If the worker does not wish to use this new stitch, the centres may be filled up with French knots instead, still keeping the arrangements of bands of different colour as in the plate. The silk, either for the French knots or trellis, is used without being split. The trellis stitch is worked in rows of three from left to right, and three from right to left alternately, changing the shade of pink with the direction of the rows of stitching. It finishes up at the narrow part at the base with as many rows of the deepest shade of pink as are necessary, worked from right to left. Upon arriving at the end of a row of stitching, the thread must be run along the back, in order to reach the point for commencing the next row. It is not necessary to go into more detail in the description of the working of these centres, for in Part II the method of working this particular variety was explained very thoroughly.

The stamens are worked in chain stitch in the buff colour. They are finished off with black French knots, made with two twists upon the needle, in the split silk. The stems and tendrils are worked in chain stitch in black; the leaves at the base of the spray are outlined in chain in the darkest shade of myrtle green. The turned-over ends are solidly filled in with chain in the palest shade of myrtle. The rest of the leaf has a line of the palest myrtle running close to the outline in chain, whilst the centre is filled in with double back stitch

in the darker shade of dull green. The floss is not divided for this part of the filling.

The other leaves are worked entirely in chain stitch. First, the outline is carried out in the greenish blue; then the veining, in the deepest shade of myrtle. Next, outline the veining with the buff yellow, and then fill in, between it and the blue outline, with two rows of dull green. The paler green should be next to the blue outline, and the deeper shade next to the yellow.

This spray might be applied to any subject that requires some kind of central decoration. It is worked in very durable stitches, and so it would stand fairly hard wear. It could be repeated over the centre of some large hanging, or it is quite suitable for application to Church embroidery. It could easily be adapted to a lectern hanging, or to some part of an altar frontal. For the linen material used in the illustration a silk one might be substituted, either white or coloured. If a coloured one is chosen, a dull gold or tussore, or a very dark blue, perhaps would be the best. Slight changes in the colour scheme might or might not be necessary. If a loosely woven material is used for the ground, it is always easier to work upon if a thin backing is applied to it. This can be done and the work still executed in the hand by tacking the two materials together rather close to the outlines of the pattern. The numbers of the colours of the Stout Floss or the "Filo-Floss" used in working out the spray are as follows:—

Black	.	.	.	No. 178.
Blues	.	.	.	Nos. 14, 12a, 10, and 44.
Gold	.	.	.	No. 40c.
Pinks	.	.	.	Nos. 2 and 4.
Greens	.	.	.	Nos. 20a, 20b, and Nos. 15r, 15p, 15m.

G. C.

“A SCHOLEHOUSE FOR THE NEEDLE,” AND OTHER PATTERN BOOKS

ANY one who has studied a collection of samplers or embroideries belonging to a given period will have noticed that they often have certain details

circulation of books of patterns, copies of which have come down to our time. Few have survived in comparison with the great number that must once have existed, but

Fig. 39

in common. The familiar little cross-stitch birds placed *vis-à-vis*, the baskets of fruit and flowers, borders, floral sprigs, in fact many examples of such recurring elements, will come immediately to the memory. This similarity of detail leads us to suppose that the workers went to some common store from which to choose the elements for their designs. Such a store was provided by the

this is not surprising, as the workers made great use of their pattern books, and often pricked through the print of the pattern and rubbed the pounce through the perforations directly on to the material. Some of the books bear witness to this, and though it is interesting to notice that the method of transferring the pattern was the same then as now, yet one cannot help regretting

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that this way of making tracings from a book often entailed its partial destruction, even to the extent of tearing out pages. A famous one, published in the year 1621, was popular enough to run through twelve editions, and there are perhaps not half a dozen copies of it in existence.

them seem to be devoted to lace, but sometimes the lace pattern books contain a number of pages of designs specially arranged for embroidery. In one or another there are to be found delightful drawings of birds, knots, and many geometrical devices, with numerous borders and charming little con-

Fig. 40

Those who wish to make a study of old pattern books should consult Mrs. Bury Palliser's *History of Lace*, in the appendix to which there is a long list of them, accompanied by descriptive notes. They are English, Flemish, German, French, and Italian in origin and extend over a period of about two hundred and fifty years, dating from 1527 to 1784. The greater number of

ventional floral sprigs; there are Roman and Gothic alphabets, examples of cursive writing and monograms. Some of the designs are drawn out in squares ready to be copied in cross stitch upon canvas, others are arranged specially for cutwork.

One book, which has special interest for the embroideress, is English, and is called *A Scholehouse for the Needle*. It was printed

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in Shoe Lane, London, at the Signe of the Faulcon, by Richard Shorleyker in 1632. The title continues as follows: "Teaching by sundry sortes of patterns and examples of

Fig. 41

different kindes, how to compose many faire workes; which being set in order and forme according to the skill and understanding of the workwoman, will, no doubt, yield profit unto such as live by the Needle and give good content to adorn the worthy." In a preliminary note to the reader the author again emphasises the fact that the worker is intended to make her own compositions with the help of the elements illustrated. If the embroideress of that period was thought capable of arranging her own designs, surely her twentieth-century descendant should be equally skilful.

The book is divided into two parts, and a second title page, introducing the latter part, informs us, "Here followeth certain patterns of cutworkes, and but once printed before, also sundry sortes of spots as flowers, birds, fishes, etc., and will fitly serve to be wrought, some with gould, some with silke and some with crewell or otherwise at your pleasure."

Present-day workers may be interested to see some examples from a seventeenth-century pattern book. Those illustrated in figs. 39 and 40 have been taken from Shorleyker and from the collection of the "sundry sorts of spots" occurring in the latter part of the book. These two illustrations give a fair idea of the arrangement of the book, for they are practically two complete pages, although the figures do not occur in just this order. The size is nearly identical, and the sprigs are placed in rows, with lines between them. To those who are acquainted with sixteenth- and seventeenth-century embroideries, many of these details will be already familiar. Almost identical sprigs are to be found on the embroidered dresses, caps, and gloves of that period.*

These elements were intended to be used as detached sprays, as powderings over a ground, or for building up designs by arrangements in groups. It would be a simple experiment in design to take some of the sprigs and try various arrangements and groupings of them. For instance, the rose-like spray in the top row in fig. 40, towards the right-hand end, lends itself easily to being arranged as in fig. 41, where it is four times repeated, the main stem each time radiating outwards. The small detached sprig, also used in the design, can be seen in fig. 39. The surrounding framework is an addition, and this shows the way in which designs frequently develop by the addition of something new to what is already present. The curious little spray in the centre of fig. 39 seems to be intended for a band design. Fig. 42 shows it repeated five times, the succession making a neat light border which might be applied to a variety of purposes. If the worker wants more variety in the border, all that is necessary is to substitute different flowers each time, or a leaf alternating with the tendril. Even though only in part-outline, these little patterns are most suggestive

* See Nos. 198 (1900) and 1507 (1882) in the Victoria and Albert Museum.

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of dainty embroidery; in fact some of them seem to show that the designer was acquainted with stitches, which is always an advantage. The two large leaves in the bottom row in fig. 40 show some designs for simple geometrical open fillings. The interesting little powdering next to the left-hand leaf might be used for another filling of the same kind (see fig. 43). Many powderings like this are to be found on the large decorative leaves so characteristic of the seventeenth-century woolwork hangings.*

Patterns of a stock size often need to be increased or decreased in order to adapt them to the purpose in hand. At the end of the book there is a squared-up page, accompanied by some explanatory notes, showing the worker how she may alter the scale of the designs with very little trouble. It is still a very common method to employ, so we reproduce the page (see fig. 44), adding a detail in order to show how it works out, and also quote the directions, which, in Shorleyker, are quaintly printed in the centre of the diagram: "I would have you know that the use of these squares doth shewe, how you may contrive any worke, bird, beast or flower; into bigger or lesser proportions, according as you shall see cause; as thus, if you will enlarge your patterne, divide

The pattern books are usually attractively printed with neat borders framing the pages and an engraving for frontispiece, showing ladies working at embroidery frames or

Fig. 43

some such subject. They open sometimes with dedicatory verses to "Queens and other ladies who have been famous for their rare inventions and practice with the needle," and to "all degrees of both sexes that love

Fig. 42

it into squares; then rule a paper as large as ye list into what squares you will, then looke how many holes your patterne doth containe; upon so many holes of your ruled paper drawe your patterne."

or live by the laudable employment of the Needle." Perhaps the most famous of these poems is one named "The Praise of the Needle." It occurs in the "Needles excellency," a very famous and popular lace

* See Lady Marian Alford's *Needlework as Art*, plate 85; also a coverlet and pillow cover of "black work" belonging to the Viscount Falkland, on exhibition in the Victoria and Albert Museum.

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pattern book, and was written by John Taylor, known as the Water Poet. It is a long rigmarole of verse, but a quotation may be interesting. For instance, there is

nowadays under other names. In another part of the poem is a list of the countries which the patterns illustrated in the book have come from. This is interesting be-

Fig. 44

a list of the embroidery stitches then in use :—

“For Tent-worke, Raised-worke, Laid-worke, Frost-worke,
Net-worke,
Most curious Purles, or rare Italian Cutworke,
Fine Ferne-stitch, Finny-stitch, New-stitch and Chain-
stitch,
Brave Bred-stitch, Fisher-stitch, Irish-stitch and Queen-
stitch,
The Spanish-stitch, Rosemary-stitch and Mowse-stitch.
The smarting Whip-stitch, Back-stitch and Crosse-stitch,
All these are good, and these we must allow,
And these are everywhere in practice now :
And in this Booke, there are of these some store,
With many others, never seen before.”

Some of the stitches bear quite familiar names, others sound attractive but unfortunately are either obsolete or known

cause it shows the various foreign influences that were then recognised as being at work moulding the course of English designs.

It would perhaps be an attractive undertaking for an enthusiastic embroideress to make herself, besides a stitch sampler, a design sampler. It might take the form of a book in which were gathered together and classified a number of interesting notes. There might be some pages devoted to coloured drawings of her favourite flowers and a collection of simple conventional flower sprigs of various typical forms. The best way of finding the latter would be to study old embroideries, patterned silks, or patterned anythings, for it

is by no means necessary to keep to one's own special craft for suggestive ideas—we may borrow from all. By the study of past work the embroideress learns how other people have done things, and she can always add variations of her own. To continue with the design sampler, there might be pages devoted to all the different kinds of knots, wreaths, baskets of flowers, monograms, etc., that at different times are met with; then mementoes of satisfactory design plans, colour

schemes, and so on. A book such as this could either grow to quite immense proportions, or, on the other hand, be a very simple noting down of anything interesting to the worker's special craft. By an undertaking of this kind an embroideress would greatly increase her knowledge and ability, and would at the same time compile a most attractive book that would be very useful when some new piece of work was under consideration.

G. C.

PLATE X. A SIDEBOARD CLOTH

PLATE X is an illustration of an embroidered sideboard cloth worked in brightly coloured "Mallard Floss" on a fairly coarse white linen. The cloth is two yards long by eighteen inches wide, the embroidery being placed at each end. In the illustration the centre is folded out of sight. The reproduction is reduced in size, the width of the original across the embroidered part at its widest point being $1\frac{1}{2}$ inches. The design is conventional and is taken from the rose.

The flowers are outlined with close buttonhole stitch in bright red, with yellow, black, and pink centres. The leaves, blue on the outside, have emerald green fillings; the stems are in green, with blue bracts breaking the principal curve at intervals. The knot tying the two leading lines of the pattern is worked in yellow with a black outline.

Seven stitches are used—stem, double back, chain, French knot, buttonhole, and satin (for all of which see Part I), and Cretan (see fig. 36).

The curved lines of the stems are worked in stem stitch, in dark green, more rows of stitching being used at the beginning where the stem is thickest. The best way to commence is to work a line of stem stitch round the main lines of the pattern, leaving the spaces where any overlapping part interrupts them. Four rows of stitching are worked

at the starting point where the stem is thickest, then three rows where it is a little thinner, which happens to come where the line is straightest; then two rows where the line is thinnest. The two rows begin where the second group of leaves branch off from the main stem.

The branch lines of the flowers are composed of two rows of stem stitch. The way to work the stem stitch in this particular example is to take up the same number of threads of the ground each time, and bring the needle out where the last stitch went in, thus making a neat row of back stitching upon the reverse side.

To work the leaves, begin with the filling. The stitch is Cretan, and it should be worked closely together, so arranged that the wrapping-over of the silk forms a neatly plaited line down the centre of the leaf. This effect is obtained by not going quite up to the centre line of the leaf, but leaving about one thread of linen on either side of it.

Begin at the top of the leaf, taking care to keep the shape well, and gradually slanting the stitches a little less upon getting lower down it. The outer part of the leaf is worked in double back stitch, and it is well to begin it at the base. Care must be taken to keep the band of stitching worked evenly round the leaf, as the outer side is much farther round than the inside, and a

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larger stitch must therefore be taken on the outer line than on the inner, especially where the line is most curved. The apex of the leaf needs careful arrangement of the stitches in order to make a good point. A little practice is needed to overcome slight difficulties of this kind which are always presenting themselves to the embroideress. The little bracts are worked in satin stitch in blue. The point about these is to keep the drawing of the outlines; they are most easily commenced at the base, at the point of interception with the main stem.

The outer edge of the flower is worked in bright red in buttonhole, and care should be taken to go well down with the stitch between the little scallops, otherwise the outline will incline towards a circle and lose its petal-like shape.

The centre is composed of an outer circle of black French knots with four yellow ones inside. The knots are made with one twist of the silk round the needle. A line of open buttonhole in pink is worked round just outside the centre, the heading of the stitch touching the circle of black knots. In the centre of each petal is a pink French knot, made with two twists round the needle.

If the centre of the cloth appears bare when the rest is worked, a powdering of small spots or leaves, similar to those placed in the centre of Plate III (Part I), might be added.

Some alternative colour schemes would be to work the design in two or more shades of one colour, or in blue and gold, or the ground might be coloured with the pattern either in white or colours. The design could easily be adapted to a square mat by being repeated as it appears in the illustration, the cinque-foil being repeated on the other two sides to bind the main lines together where they come nearest to one another.

Or it could be arranged to suit case-ment curtains by arranging the repeat so that one pattern would follow another instead of coming from opposite directions as they do in the illustration, with the stem making a continuous straight line, and not having a separate beginning for each repeat. The flowers could be repeated singly at regular intervals all over the curtain, giving a spot effect. The curtain might then be worked in several rich colours, giving a glow of colour against the light, or it could be worked in the predominant colour of the room on a white or coloured ground.

The quantities of "Mallard Floss" used for the sideboard cloth are:—

Light Green . . .	No. 85	about 2 skeins.
Dark Green . . .	No. 86	" 2 "
Red . . .	No. 44	" 2 "
Blue . . .	No. 20g	" 2 "
Pink . . .	No. 40a	about 1 skein.
Black . . .	No. 82	" 1 "
Old Gold . . .	No. 121	" 1 "
Yellow . . .	No. 186g	" 1 "

L. F. SWAIN.

HERALDIC EMBROIDERIES

NO one who has had occasion to examine any series of old wills and inventories, especially those of the fourteenth and fifteenth centuries, can fail to have noticed what a large part was played by heraldry in the household effects of our forefathers. In the vestments and other ornaments of the chapel, the "hallings," "bankers," and like furniture of the hall, the hangings and curtains of the beds and

bedchambers, the gold and silver vessels and utensils of the table, in carpets and cushions and footstools, shields of arms, badges, mottoes, and quasi-heraldic devices of all sorts were as common as blackberries in autumn. And the evidence of illuminated pictures and monumental effigies is equally strong in showing that heraldry was quite as much in vogue for personal adornment. As a matter of fact heraldry had its very origin

A SIDEBOARD CLOTH.
(For particulars see page 86.)

EMBROIDERY

in a system of devices to be worn on shields and "coats-of-arms" to distinguish the wearer in battle, and from the coat-of-arms of the knight it was but a step to the armorial gown or mantle of his lady. And there were then no ridiculously phrased handbooks or pedantic rules of proportion, no foolish jargon or cumbrous phrasing to vex men's minds, but the beautiful Art of Heraldry was revelled in like the sunshine, and utilised in every conceivable and appropriate way to adorn both the house and its indwellers.

As the object of these notes is to show how heraldry was and may still be used in embroideries, it is not necessary to discuss the origin of heraldry itself, but it may be useful to point out that a desire to pun upon the bearer's name whenever possible was always present, and some amusement may be extracted from early examples and descriptions of arms, crests, and badges in trying to discover the allusion. The point may be borne in mind, too, in any revivals at the present day.

As might be expected, the inventories of Church stuffs furnish us with some of the earliest examples of heraldic embroideries, generally in sufficiently precise terms to make it easy to realise what the things looked like. Thus an inventory taken in 1315 of the ornaments at Christ Church, Canterbury, gives such instances as "five copes of Katharine Lovel sewn with arms of divers persons," "a white albe with the arms of the King of Scotland" on the apparels, a cope of Peter, Bishop of Exeter (*ob.* 1291), of baudekyn with biparted shields, a cope of John of Alderby, Bishop of Lincoln, of green cloth embroidered with shields, an albe with apparels of blue velvet embroidered with shields and fleurs-de-lis, an albe sewn with lozenges of the arms of the King of England and of Leyburn, an albe sewn with shields and embroidered with letters, and an albe sewn with the arms of Northwood and Poynyngs in quadrangles.

The inventory of the vestry of Westminster

Abbey taken in 1388 is even better. It includes such things as a frontal with the arms of England and France in red and blue velvet woven with golden leopards and fleurs-de-lis from the burial of King Edward III., six murrey carpets woven with the new arms of the King of England and of the Count of Hainault (in other words, the quartered shield adopted by Edward III. in 1340, and that of his queen, Philippa of Hainault), four

Fig. 45

carpets of the arms of the Earl of Pembroke, four carpets of red colour woven with white shields having three red fleurs-de-lis of the gift of Richard Twyford (whose arms they were), five black carpets having in the corners shields of the arms of St. Peter and St. Edward, two green silk cloths sewn with the arms of England, Spain, and Queen Eleanor, a bed with a border with the arms of the King of Scotland, three new copes of red colour of noble cloth of gold damask with orphreys of black velvet embroidered with the letters T and A and swans of pearl, the gift of Thomas, Duke of Gloucester (his wife was Eleanor or Alianora de Bohun, whose family badge was a white swan), a cope of red velvet with gold leopards and a

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border of blue velvet woven with gold fleurs-de-lis, formerly the Lord John of Eltham's (whose fine alabaster tomb in the abbey church shows the same arms). A St. Paul's inventory of 1402 also contains a few choice examples: a cope of red velvet with gold lions, and orphreys of the collars of the Duke of Lancaster and a stag lying in the middle of each collar, a suit of blue cloth of gold powdered with gold crowns in each of which are fixed two ostrich feathers, six copes of red cloth of gold with blue orphreys with golden-hooded falcons and the arms of Queen Anne of Bohemia, three albes and amices of linen cloth with orphreys of red velvet powdered and worked with little angels and the arms of England, given by Queen Isabel, three albes and amices with apparels of red cloth of gold powdered with divers white letters of S and with golden leopards, given by John of Gaunt, two great cushions of silk cloth of blue colour with a white cross throughout, and in each quarter of the cross the golden head of a lion.

The secular documents carry on the story.

In 1380 Edmund Mortimer, Earl of March, leaves "our great bed of black satin embroidered with white lions (the badge of the house of March) and gold roses with escutcheons of the arms of Mortimer and Ulster," and in 1385 Joan, Princess of Wales, leaves to King Richard her son "my new bed of red velvet embroidered with ostrich feathers and leopards' heads of gold with branches and leaves issuing from their mouths." In 1389 William Pakington, archdeacon of Canterbury, leaves "my hall of red with a shield of the King's arms in the midst and with mine own arms in the corners"; and in 1391 Margaret, the wife of Sir William Aldeburgh, leaves (i) a red hall with a border of blue with the arms of Baliol and Aldeburgh, (ii) a red bed embroidered with a tree and recumbent lion and the arms of Aldeburgh and Tillzolf, and (iii) a green bed embroidered with griffins and the arms of Aldeburgh.

The inventory of Thomas of Woodstock, Duke of Gloucester, taken in 1397, also contains some interesting items: a white halling (or set of hangings for a hall) consisting of a dosser and four costers worked with the arms of King Edward (his father) and his sons with borders paly of red and black powdered with (Bohun) swans and the arms of Hereford; a great bed of gold, that is to say a coverlet, tester and selour of fine blue satin worked with gold Garters and three curtains of tartryn beaten (with Garters) to match; a large bed of white satin embroidered in the midst with the arms of the Duke of Gloucester, with his helm, in Cyprus gold.

A number of other items in the list are also more or less heraldic: a bed of black baudekyn powdered with white roses; a large old bed of green tartryn embroidered with gold griffins; twelve pieces of tapestry carpet, blue with white roses in the corners and divers arms; a large bed of blue baudekyn embroidered with silver owls and gold fleurs-de-lis; fifteen pieces of tapestry for two rooms of red worsted embroidered with blue Garters of worsted with helms and arms of divers sorts; three curtains of white tartryn with green popinjays; a green bed of double samite with a blue pale (stripe) of chamlet embroidered with a pot of gold filled with divers flowers of silver; an old bed of blue worsted embroidered with a stag of yellow worsted; a red bed of worsted embroidered with a crowned lion and two griffins and chaplets and roses; a bed of blue worsted embroidered with a white eagle; a coverlet and tester of red worsted embroidered with a white lion couching under a tree; a single gown of blue cloth of gold of Cyprus powdered with gold stags; and a single gown of red cloth of gold of Cyprus with mermaids.

In 1381 William, Lord Latimer, leaves "an entire vestment (or suit) of red velvet embroidered with a cross of mine arms," and in 1397 Sir Ralph Hastings bequeathed

"a vestment of red cloth of gold with orphreys before and behind ensigned with maunches and with colours of mine arms," which were a red maunch or sleeve on a gold ground. Among the chapel stuff of Henry Bowet, Archbishop of York, in 1423 were a sudary or veil of white cloth with the arms of the Duke of Lancaster on the ends and two costers or curtains of red embroidered with great white roses and the arms of St. Peter (the crossed keys). In 1437 Helen Welles of York bequeathed "a blue tester with a couched stag and with the reason (or motto) *Auxilium meum a Domino*." In 1448 Thomas Morton, a canon of York, left a halling with two costers of green and red say paled with the arms of Archbishop Bowet, and in 1449 the inventory of Dan John Clerk, a York chaplain, mentions "two covers of red say having the arms of Dan Richard Scrope and the keys of St. Peter worked upon them."

To the examples worked with letters may be added a bed with a carpet of red and green with crowned M's left about 1440 by a Beverley mason, who also had another bed with a carpet of blue and green with Katherine wheels; a vestment left in 1467, by Robert Est, a chantry priest in York

Minster, "of green worsted having on the back two crowned letters namely R and E"; and a bequest in 1520 by Thomas, Duke of Norfolk, of "our great hangede bedde palyd with cloth of golde whyte damask and black velvet, and browdered with these two letters T.A.," being the initials of himself and his wife.

There is of course nothing to hinder at the present day the principles embodied in the foregoing examples, which could easily be extended *ad infinitum*, from being carried out in the same delightful way; and a small exercise of ingenuity would soon devise a like treatment of one's own arms, or the use of a favourite device or flower, or the setting out of the family "word," "reason," or motto. The medieval passion for striped or checkered hangings, etc. might also be revived with advantage, and the mention in 1391 of "a bed of white and murrey *unded*," shows that wavy lines were as tolerable as straight.

What better patterns for next winter's work could a school of embroidery have than the ornaments quoted above from the inventory of Thomas, Duke of Gloucester, and what pretty things they would be when done!

W. H. ST. JOHN HOPE.

PLATE XI. DESIGN FOR THE DECORATION OF A CHILD'S DRESS

PLATE XI illustrates a yoke and a portion of a band for a child's dress. It is intended for a child of about seven years of age, but, owing to the shape of the yoke, it could be adapted for a child of any age up to twelve or fourteen. The embroidered vest is not intended to reach from sleeve to sleeve, but is cut square like a Dutch yoke. It will be seen that this will prevent restriction to any one particular size. The width of the yoke in the original is about six inches across the base; it is slightly reduced in the reproduction. Four stitches

are employed to work out this design, all of which were illustrated and described in Part I.

It is suggested that a rather fine white linen should be used to work upon, one that has a firm yet soft texture and combines good wear with pleasant manipulation. It is very important that a good material be used, as it would be a pity to spend time and labour on embroidering a material that a child's restless activity would soon wear into holes. The design is based on the early summer flower, the Scarlet Pimpernel,

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and has been kept simple and dainty with rather bright colour, in order to carry out the "child-like" idea as much as possible, so that the dress shall be in keeping with the wearer. The red flowers, occurring at regular intervals, shine out from the leaves with jewel-like brightness, and are relieved by a golden spiral border. The whole is picked out and brightened up by little black dots. The stitches used are as follows:— For the red flowers, a filling of double back stitch in double thread, with an outline of stem stitch in single thread; black French knots made with a single thread, and twisted twice round the needle for the centres and suggestions of stamens. The leaves are worked in double back stitch in the lighter green, with double thread, but they are not outlined at all. The yellow scroll border is worked in chain in double thread, with a black French knot at the end of each spiral, and the stems are in the same.

When making up the dress the style of the whole should be kept simple, hanging straight down and loose from the shoulders. The border, illustrated in the lower part of the plate, can be used either on the waist-belt, cuffs, or on the wide hem round the base of the skirt. Tiny tucks might be used on the shoulders and below the yoke, both back and front; those below the yoke should be about two inches in length, and those on the shoulder longer, to reach to the same level as the rest.

The belt, if used, can be made quite separate. A hem-stitched border about two

inches wide would make a simple and effective finish for the bottom of the skirt. The sleeves reach to the elbow, and might be rather full, and a hem-stitched border round the frill about an inch wide would be in keeping with the rest of the dress.

Instead of working the leaves in the way suggested above, buttonholing might be used, the heading of the buttonhole making a little ridge round the outer edge of one side of the leaf. If the scroll border be found too tedious, a nice border may be made by a zigzag chain stitch, each stitch being about one-sixth of an inch long, a black French knot being placed in every angle.

An alternative plan for the colouring would be to use a forget-me-not blue for the flowers, keeping the same shades of green as in the plate, and with the same black French knots to sharpen them up. Quite a different plan for the whole colour scheme would be to use a linen of a rather deep blue colour, working the flowers in white, with palish green leaves and stems. The zigzag or scroll border would also be worked in white with green French knots.

The silk used in the worked-out example is "Filo-Floss." Washing Filoselle could be used instead, if it were preferred.

The following colours have been used in working out in "Filo-Floss":—

Flowers	.	.	No. 68	about 1 skein.
Leaves	.	.	No. 178d	" "
Stems	.	.	No. 178g	" "
Border	.	.	No. 128	" "
Black dots	.	.	No. 178	" "

E. M. HILL.

DESIGNING—III. BORDERS

IN speaking of the structure or plan of a design we are entering upon the discussion of some of the formal arrangements by means of which decorators have habitually presented their ideas. The study of the history of some of these arrangements would prove most interesting; the

examination of a long series of designs produced by craftsmen in the past would enable us to trace the history of particular forms of arrangement, and to follow their development step by step, observing the influence of various schools of designers in moulding them into their present forms.

DESIGN FOR YOKE AND BAND OF A CHILD'S DRESS.

(For particulars see page 86.)

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For the universally accepted beautiful types of design have not reached their state of perfection all at once in the hands of one worker ; it is only by a slow development, by going through a course of graftings and prunings, that the result has been finally attained.

A good deal can be learned about designing by taking one simple form of composition and systematically following out the possible variations to which it may be subjected in order to adapt it to new conditions. Let us take a very distinct type of arrangement,

Fig. 46

one which the usage of many ages has moulded into well-established forms, and discuss it in some detail. The panel surrounded by a border is a form of arrangement familiar in all crafts, and is a scheme which has been made great use of in embroidery. In the most simple forms of this arrangement the border is a single band of plain colour or simple ornamental work, either framing a panel in order to keep it distinctly apart from its surroundings, or setting off the interior decoration by means of some contrasting colour or design, or merely providing an even finishing-off by a simple edging or binding.

Before discussing the decoration of borders it is as well to mention a few of their possible uses and the positions in which they may be placed. They are found enclosing panels of a great variety of shapes—square, oblong, hexagonal, octagonal, circular, or other simple geometrical forms which acquire singular beauty when so emphasised. Two of these forms may be used upon the same piece of work ; for example, a hexagonal

Fig. 47

panel of ornament with a surrounding border may be placed in the centre of a square or other figure, which itself may be edged with marginal decoration (see fig. 46). Borders may be of a great variety of widths ; even in the same piece of work they may vary in width. Long narrow objects, such as sideboard cloths, often have borders wider at the ends, and the decorated margins of curtains frequently increase in width at the base.

Borders may be decorated in a great variety of ways. Floral decoration is very

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common, and usually conforms to one of a limited number of typical arrangements, some varieties of which are given in fig. 47. The two pieces of embroidered border illustrated in figs. 48 and 49 conform to a like plan, but the detail is different. Geometrical work is another variety of this kind of decoration, splendid examples of which are seen in Arab work. It must be remembered also that floral and geometrical work combine most excellently

Fig. 48

in the same design. Borders may have secondary borders, as in the example of Persian workmanship given as the headpiece of this number. In it a strip of floral work is contained within a couple of additional bands of somewhat similar ornament, each edged with a pair of little decorated lines. Decoration, formed of simple edging lines similar to these, is a matter of great ease to the embroideress, for many stitches make excellent narrow lines of ornament. Thus there may be borders composed of many

members; bands of floral ornament edged with lines of colour or geometrical work; bands of plain colour with margins of floral work, and so forth in infinite variety. It is in Oriental art that we can study the complex instances to best advantage; the woven, printed, or embroidered coverlets, carpets, and hangings of Persian and Indian workmanship dating from the sixteenth to the eighteenth centuries supply numberless examples all of extreme beauty.

Fig. 49

The arrangement of the corner in a border design often presents a difficulty, especially when an elaborate ornamentation is under consideration. To Oriental designs, we can go again for information, for they supply all kinds of answers to the corner problem. Sometimes in them the difficulty is simply ignored, but in carefully designed pieces various solutions of it are to be found. One is given in fig. 48, a detail taken from a Persian embroidered cover of eighteenth-century date. Here the designer has so spaced out the surface that the repeat

of the design is exactly the width of the corner, which makes getting round it quite a straightforward matter. In a common type of border formed of two or more parallel bands of ornament, the internal bands cross at the junction points and continue until they meet the external members, thus producing a little square panel in each corner of the work (see fig. 49). This method of arranging the corner allows of a rosette, a sprig of foliage, or other piece of ornament being placed in it, not necessarily having any relation to the rest of the design. This is a good plan to follow in arranging very

complex decorated borders, as it removes the corner difficulty satisfactorily, and adds an interesting fresh detail to the design. The circular border appeals most directly to beginners, since it has no corner !

From this brief indication of some of the most usual arrangements of borders, the embroideress will perceive the many possibilities which lie before her in marginal work alone. The decoration of bands with simple flowing floral designs, geometrical work or sprigs will afford a useful introduction to larger and more difficult undertakings.

A. H. CHRISTIE.

PLATE XII. A COSY-COVER WITH A BLUE CORNFLOWER DESIGN

PLATE XII shows a simple all-over floral design edged with a conventional border. It is carried out almost entirely in shades of blue, the only additional colour being a reddish purple which is introduced at the flower centres. Executed in "Mallard Floss" silk upon a white linen ground it is a very simple piece of work. Such objects as this require a little decoration, just sufficient only to avoid a noticeable plainness. The stitches used are chain, French knots, double back stitch (for which see Part I), and coral (see fig. 35). The colour scheme comprises four shades of blue, a purple, and black.

The petals of the flowers are worked in double back stitch in two contrasting shades of blue (the palest and the darkest but one of the four in use). The darker outer part is worked first. Beginning at the base of the petal, the band of stitching divides almost at once and continues independently up each side of it. The paler blue in the middle is added after the outer part is worked. A small circle of chain stitch in black is run round the centre of the flower. In the middle of it is a purple French knot, and close outside the black line, in the in-

terstices between the petals, six similar knots are added.

The curved stems and offshoots are worked in coral stitch in the two palest shades of blue. The stems are worked first in the darker of the two shades, the offshoots being then added in the paler shade. The latter are most easily worked by commencing at the apex of the stem and working gradually downwards, taking the offshoots as they come, alternately on either side. The knots of the coral stitch should be placed quite close together in order to give an irregular, notched appearance to the curving stems.

To work the border, begin with the outline in chain stitch in the deepest shade of blue. The points of the pattern should be carefully emphasised by carrying the thread through to the back over the chain loop made at the point, and then bringing it through again in position for continuing the line. By thus finishing off the chain line and starting afresh, the various points are made decisive, whereas if the chain ran on continuously the sharp points of the pattern would probably be slurred over. About one-sixteenth of an inch inside the

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chain outline, a line of the palest shade of blue is run along parallel to it. The only difference between this and the ordinary plain-needlework running stitch is that only one thread of the material is picked up by the needle each time, in order to leave as much as possible of the thread upon the surface. The outer line should be followed as closely as possible by this inner running line. The half flowers abutting on the edging cord are fashioned in exactly similar manner to the outline just described. The flower is in chain stitch in the deepest blue, and a sixteenth of an inch outside it is run a line of the palest blue. In the centre of the flower, close to the cord, is placed a purple French knot. This completes the embroidered part, except that the other side has also to be worked. It would be well there to try at least a new treatment of the flower, if not another variety altogether. When the embroidery is completed, the two sides must be sewn together and the cord sewn on to hide the join and to finish off the base. The sewing on of this should

be invisible, which is attained by slightly untwisting the cord at the moment of stitching and inserting the needle in the opening. If the cord is made by the worker, it should be of white and of the darker of the two blues used upon the petal. It is made of two plies, each built up of about twelve threads of "Mallard Floss." If not to be home-made, the best match obtainable must be procured.

For alternative schemes of colour, shades of gold, pink, or mauve might be used, just as may happen to suit the requirements of the case. It is as well perhaps to keep to shades of the same colour rather than, say, green stems and other coloured flowers.

The silks necessary for working the two sides (not including making the cord) are as follows:—

Blues	.	.	No. 20e	.	about 3 skeins.
"	.	.	No. 20b	.	" 2 "
"	.	.	No. 20d	.	" 2 "
"	.	.	No. 20f	.	" 1 "
Purple	.	.	No. 165a	.	" 1 "
Black	.	.	No. 82	.	" 1 "

G. C.

THE DYEING OF SILK

(The portions of this article which relate to the methods, etc., used in ancient times are taken from a monograph specially contributed by Sir Thomas Wardle)

HAVING traced the history of silk from the cocoon through the winding, throwing, and spinning processes, it now remains to complete this survey of its manufacture by some account of the art of dyeing. We use the word "art" advisedly, for there is none subtler or more complex. As an industry it is both highly organised and highly specialised; and rightly so. Some dye-houses produce nothing but blacks, others nothing but the heavily adulterated colours used in weaving; others again devote themselves almost entirely to pure fast colours, and the dyeing of Tussah Silk is always a department by itself. The industry is centred in three towns, so far

as Great Britain is concerned—Leek, Macclesfield, and Coventry, though one or two dye-houses still exist in the Spitalfields district in London. The character of the water-supply, which must be both soft and free from iron or lime, limits the localities in which the trade can be carried on to those in which these conditions prevail.

The art originated in the most remote antiquity, probably being coeval with the production of textiles and possibly even older. Our ancestors, we know, smeared their bodies first, and subsequently their clothes, blue with woad, a dyestuff still grown in certain parts of Lincolnshire (perhaps in the self-same fields) and which is

PLATE XII.

A COSY-COVER.

(For particulars see page 86.)

used (though not for tinctorial requirements), amongst other ingredients, for the navy blue of our sailors' clothes. The natives of other countries used henna in the same way, as do certain peoples in Africa at the present time.

One of the oldest textiles known is a linen burial cloth in which are woven two stripes of blue, which, upon examination, prove to be Indigo; the rest of the cloth is undyed. It is Egyptian and is of the XXVIth Dynasty, or 665 years before Christ. The dyeing of the threads and tissues of the East has from time immemorial been based upon sound artistic principles, the colours obtained being good in tone and in most cases very permanent, and still remain so where they are outside European and trade influences.

The reds, blues, greens, yellows, and purples formerly dyed by the Christian Copts of Egypt are notably excellent, as is shown by the textiles brought over in recent times by Professor Flinders Petrie and other explorers. They date from the fourth to the tenth centuries A.D., and their colours are as bright and sound, in most cases, as when they were first dyed.

The principal dyes used were, in former times, Indigo, and in later times Prussian Blue, for blues; Munjeet Madder, Morinda Kermes ("qui in roses micat"), Cochineal Lac, and a few vegetable products for reds. Cochineal is a South American insect-dye of great beauty and permanence when properly dyed. It was found by the Spaniards in 1518, and gradually superseded the reds of the Mediterranean shores, the *Coccus quercus* or oak-feeding Coccus; the Cochineal or "grain" of Mexico being *Coccus cactus*, or cactus-feeding insect, both being small beetles. The Mexicans used cochineal long before it was imported into Europe. Many yellow-yielding plants were used, all more or less fugitive—Fustic Quercitron, Anatto, and so on. Then there was the celebrated Purple of Tyre, the most venerated of all the colours given to dyeing, about which Pliny

wrote much. It was a dye found in the shells of the genus *Murex*, but although attempts have been made to re-discover the dyestuff, they have never been successful. The single-dyed purple was worth 100 denaria or £4 sterling per pound of a century ago; the twice-dyed purple wool could not be bought in Rome for less than 1,000 denaria per pound, or almost £40 sterling. Romulus wore it only in his regal mantle, and Tullus Hostilius, the third King of Rome, wore it in the prætexter or long robe with purple stripes.

Up to comparatively modern times the number of dyes was quite small. They consisted partly of "substantive" colours, that is, those for the application of which no "mordant" is needed, and a few "adjective" colours, or those which impart little or no colour to a fabric unless by the aid of what is known as a "mordant." The word is derived from the French "mordre," and means a salt or chemical which has an affinity both for the fibre and for the colouring matter, as well as for the creation of colour even where none existed in the plant extract. For instance, if a quantity of madder root were boiled in water and a fabric were then immersed in the solution, the result would be a muddy stain; but if the fabric had been previously saturated with a metallic salt, alum for instance, a rich, warm, and permanent red would be produced—the red seen in all the old tapestries and embroideries.

Indigo, on the other hand, is a good instance of an unmordanted or direct colour, and the process of dyeing with it is both curious and interesting. The Indigo is imported from India in small blocks, which have first to be ground into a paste. This paste is insoluble in water, and certain chemicals having been therefore added to dissolve it, the next step is to reduce it to white indigo. When all the constituents have been properly added, the liquor in the vat should be yellowish. The silk is then dipped in the vat, and when taken out it has a yellow

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cast, but on exposure to the air quickly changes to green, and from that to the familiar indigo blue, the cause of this kaleidoscopic change being the absorption of oxygen from the air. If darker shades are needed, the process has to be repeated until the required depth of colour is obtained. Anatto is another vegetable colouring matter which has the property of dyeing direct, producing an orange shade. The clearest and fastest orange-yellows, however, are now produced with Weld, a plant similar to the common dock plant, which is cultivated in France and elsewhere ; but the Weld yellows are always mordanted.

The fine blood-reds, as distinguished from the browner madder reds, in old tapestries were dyed with Kermes, until the discovery of Cochineal. The colouring principle is the same in both dyestuffs, but it is present in ten times greater strength in the Cochineal.

At the present time fast colours are, roughly speaking, of two kinds. The first group, known as the Eastern Unfading Dyes, consists of colours dyed in the old principles, some direct but mostly mordanted. In one sense—the absolute permanence of the colours and a certain rich beauty of tone—they are the fastest and most perfect that exist, though even amongst them there are noticeable degrees of excellence ; but the majority need care in washing and the range of colour is a little limited. The ancients were not in the habit of washing their embroideries to the extent which we do ; in fact they seldom embroidered the kind of object which needs repeated washing. Certainly they did not legislate in their dyes for the crude methods of the modern laundry. Except on some makes of embroidery silks, these old dyes are hardly ever seen nowadays ; but there is a certain satisfaction to any one using them in the thought that if the work survives and reasonable care is taken of it, the colours will be as fresh, and perhaps more beautiful, a hundred or more years hence than they are to-day.

The second group of modern fast colours are known as “Boiling Dyes,” and are mainly produced from the “Alizarin” dyes, a class of artificial mordant colours. Alizarin, which is in itself the colouring principle of the madder root, was the first natural dye-stuff prepared synthetically, being made from the coal-tar product anthracene. Alizarin is not a colouring matter in itself, but rather a colouring principle, yielding various shades, according to the metallic oxides with which it is combined. The methods of dyeing these boiling colours is in most cases to immerse the mordanted silk in the prepared bath, and then to raise the temperature of the liquor gradually to boiling point. As the heat rises the colour develops, the change being both curious and interesting to watch. Alizarin colours on silk are most difficult to produce properly, there being a continual tendency for the dye to rush to one end of the skein, and so produce an uneven and patchy effect. The mordants chiefly used are alum, chrome, and iron.

A third group are the well-known Aniline or coal-tar colours. They are fugitive to light and will not bear washing, but at the same time they are so much cheaper than the fast colours that they are largely used for all purposes where permanence is not a consideration. Indeed the problem for the manufacture of the piece silks used in women's dress is to produce a fabric which will just hang together for the few weeks or months for which it is required. The classical joke of the silk trade is that it was the silkworm who first set the example of loading or weighting silk, in allusion to the added gum or sericin which is found in it, as was pointed out in Part I. At all events the silkworm has been out-Heroded in this respect by the modern silk-dyer. It is quite normal to adulterate dress silks up to 50 or 100 per cent. in colours, whilst the weighting of blacks goes up to 400 or 500 per cent. The matter which is added to swell the thread is usually salts

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of tin or iron, and for heavy weighting the silk has to be kept for days in this concoction before dyeing. Little wonder, then, that there are seen on all hands substitutes which are said to "look as well and wear better than silk," when that much maligned fabric is robbed of all its natural strength and beauty before it is put in competition with them. In this connection it is, however, only fair to add that there are in existence one or two firms still selling piece-silks in which little or no adulteration is present.

The actual process of dyeing silk is simple. If it is "net" or "thrown" silk the gum has first to be discharged, which is effected by putting it in bags and boiling it in soap and water for a time varying according to the nature of the yarn. The liquor formed by this process is known as "suds," and is invaluable to the dyer for the purpose of washing the silk again after it has been dyed, which gives it brilliancy and a good feel. If the yarn to be dyed is a "spun" silk, the gum will already have been discharged before the process of spinning, as we saw in Part II. The only preparation needed before dyeing is to scour it with soap and water, in order to get rid of any remaining impurities and to ensure the ground colour, or "bottom" being a good shade. On the clearness and whiteness of the "bottom" will depend the freshness and prettiness of the dyed colour.

The dyeing vessels or baths are usually

square or oblong troughs made of wood or copper. The skeins of boiled-off or scoured silk are hung upon a series of smooth rods or sticks, a little wider than the bath, the lower end of the skein being in the bath, and the upper on the roller. Two men then take each board one by one, and move it towards the centre of the bath, at the same time turning over each skein by hand, so that the portion which was previously on the top of the sticks is transferred to the bath. This process is repeated as many times as are necessary to obtain the required shade. When the operatives consider the silk sufficiently dyed, a skein is taken out for the inspection of the master dyer or foreman, as the case may be, who either passes it as a match or else instructs them to add so much of the necessary colour to the bath and give it another working.

When the match is perfect the silk is taken to the hydro-extractor to be dried. In that machine it is whizzed round until it is rendered partially dry, and thence it is taken to the store or hot room to be completely dried, after which it is ready for stringeing. Stringeing consists in screwing up the skeins tightly, first one way and then the other, round a wooden arm, in order to take the stiffness out, which the rapid drying will have caused, and to pull straight any threads which may have become deranged. When this is done it only remains to finish and then skein or wind the silk, when it is ready for use.

NOTES ON THE TECHNIQUE AND MAKING UP OF EMBROIDERIES

THE amateur worker may fail to obtain good technical results through the lack of some elementary knowledge on the subject of materials, tools, etc. There is a great deal in choosing the right material for the ground, not only from the point of view of suitability, but because

some are so much pleasanter to work upon than others. It is as well, therefore, until absolute mastery over technique has been won, to make use of the simplest materials. There is nothing to equal a firmly woven linen for a background. The use of such a material makes for good stitching, even

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outlines, and helps to avoid difficulties such as puckering. From the point of view of appearance again, few materials make as effective a background as plain white linen.

Sometimes, however, textiles such as muslin or velvet may be essential to the right effect, and the difficulty of working upon them can be very greatly lessened by going the right way to work. It may be possible to strengthen a flimsy ground material by means of a firm backing, carrying the stitching through the twofold ground. The under material can be closely cut away round the edges of the embroidery after the work is finished, and thus the effect of semi-transparent ground can be regained. Grass lawn, muslin, or any loosely woven stuff can be utilised in this way by a beginner who would otherwise hesitate to use it. It is not always necessary to work in a frame when using a twofold ground; sometimes the two stuffs can be tacked together round the outlines of the pattern and then worked in the hand. Velvet is one of the most difficult grounds to work upon. It must be worked in a frame, and it is usual to use varieties of stitching that require as little passing to and fro through the material as possible, such as satin stitch worked over a padding. Few methods are as effective as finely wrought stitching worked directly on to velvet, if done well. Some workers may not be aware that by means of laying a piece of fine lawn on the upper surface of the velvet it is possible, with comparative ease, to work in fine split stitch, solidly filling in flowers, draperies, and even such difficult details as features have been successfully attempted. *Point couché rentré ou retiré* (a very beautiful method of working gold and silver threads) can be worked directly on to the velvet by this means. The overlaying material must have a close though fine texture, otherwise the pile of the velvet will creep through and be troublesome. After the embroidering is completed, it is necessary to remove all trace

of the overlay by cutting it closely round the edges of the work. To do this satisfactorily requires skill and suitable scissors. The effect of the finely wrought gold and silk, slightly sunk in the pile of the velvet, owing to the close stitches that have been taken, is quite worth the extra trouble this method entails. Before experimenting, the effect of this can be seen if the worker can obtain access to any piece of thirteenth-century embroidery executed on a velvet ground, for at that period embroidery was never worked separately and then applied to its proper ground.

Fig. 50

With regard to tools, the right size and kind of needle is of more help than workers sometimes realise in obtaining neat stitches. Too small a needle destroys the thread and too large a one makes clumsy holes in the ground. Perfectly smooth thimbles are necessary or, again, the thread is spoiled. Different kinds of scissors are required for different purposes. For any silk work, unpicking, etc. finely pointed ones are most useful. For the cutting away of material round the edges of embroidery, scissors with fine curved points are best, but even they are of very little good unless perfectly sharp and well set.

Embroidery should be done in a good light. In an ordinarily lighted room it is necessary to be close to the window, otherwise there may be disappointment upon examining work in a strong light that has been executed in a poorer one; that which seemed perfect in semi-darkness may look very different in daylight. The condition of the hands is an important item. Good work cannot be done

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with the hands moist, warm, or rough, and working with gold and silver threads is impossible unless the hands are cool. The cure is frequent washing in hot water and the use of pumice stone.

After discussing technique, it is somewhat of a relief to turn to the question of light finishing touches, the possible additions to embroideries in the way of pretty edgings, tassels, and so forth—all that may be included in what may be called, for want of a better word, the “garniture” of work. The attractiveness and interest of a piece of work may often be very much enhanced by any little extra details added upon reaching the making-up stage. It is a pity that this part of the work should sometimes be overlooked, for it has all sorts of possibilities. The sustained effort of carrying an intricate piece of work through to the end cannot but be wearisome at times; but when it is completed, the question arises as to what may be added in the way of fringes, braids, linings, or tassels. It is quite a fascinating subject, though by no means the longest or most difficult part of the work. Herein lies the opportunity for all kinds of dainty touches and ingenious devices that delight the heart of the artistic worker. At this final stage faults in the work can be corrected or the most effective points emphasised. For example, supposing the completed work turns out to be rather hotter in colour than the designer intended, it is an easy matter to choose an edging composed of the cooler colours, and thus readjust the balance satisfactorily. The repetition in the lining or marginal decoration of the prettiest colour combinations in the embroidery has the effect of emphasising these points, and thus bringing them into more direct notice.

All additions in the shape of tassels, cords, braids, etc. are usually much prettier and more interesting when devised by the worker, for these little details help the personality of the designer to shine through the work, and in this lies, sometimes, part of the attraction.

We say “sometimes” purposely, for work can be very beautiful but altogether impersonal, like most Oriental art. There is no doubt, however, that this personal touch is rather a pleasing characteristic of English embroidery. It is but a poor alternative to

Fig. 51

buy a ready-made cord or fringe, perhaps not a perfect match to begin with, and very likely to fade soon after to a still worse one. If the various embellishments are to be home-made as well as home-designed, the worker may be glad to know that they are not, many of them, difficult to manufacture. Almost every one knows how to make some kind of simple cord or braid, even without the aid of any machine, and if this is wanted, it is

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easily obtained. Any one, with or without acquaintance with the ways of weaving, could, in a very few hours, make a pretty braid for a purpose such as the joining together of the two sides of a small hand-bag, or anything else. The same braid, carried up beyond the sides of the bag, could form the handle.

In order to make a braid of this kind, wind some warp thread round and round an embroidery frame in such a way that the lines of thread come about as close together as the upright lines in fig. 50 (macramé or coarse crochet cotton would be a possible alternative if warp thread is difficult to get). Then darn to and fro upon the strings some simple pattern. This darning should be done with a blunt-pointed needle, almost exactly like ordinary darning. Fig. 50 shows the needle at work weaving some thread in and out. When two or three rows have been worked, the weft must be pressed down tightly with the finger and thumb, in order entirely to cover up the warp threads. No fastening off of threads is necessary, for the tight packing of the weft makes them secure. A new thread must never be commenced at an edge, but always towards the centre. In fig. 51 two examples of easily darned patterns are illustrated. The one on the left-hand side is the simpler, and entails the use of only two colours. Whenever a change of colour

occurs, the thread is darned to and fro between each different part independently. The one to the right is also quite easy, as all step patterns lend themselves particularly well to this method. It would be possible with this rather more intricate pattern to use several colours. This woven braid is practically identical with some forms of drawn-thread work—for example, the variety known as Hardanger work.

The two sides of a cushion are sometimes more practical as well as prettier if, instead of using the usual cord or frill, they are only lightly joined together at the sides. An interlacing of fine silk cord, or a simple insertion stitch, often will make a pretty junction and finish, apropos of which we saw the other day, upon a small cushion of Italian work, an ingenious device for this very purpose. The two detached sides of an embroidered linen cushion cover were edged round with a pretty little ball fringe. Each ball, made of some hard substance, was placed at the end of a loop. By placing the balls upon one side through the loops upon the other, a kind of buttoning together of each side of the cushion cover was contrived which was both pretty and efficacious.

Perhaps on some future occasion we shall describe how to make various other details connected with this part of the work.

G. C.

A PANEL IN CANVAS EMBROIDERY (ENGLISH, XVIITH CENTURY)

A WALL PANEL IN CANVAS EMBROIDERY

TO discuss thoroughly the subject of canvas embroidery, of which the frontispiece is an interesting example, would be a large undertaking, for canvas work of one kind or another has always been practised, and examples of it can be found in the work of all nations and of every period. The reason of its popularity is that it answers so well most of the requirements of good embroidery. It is very decorative, owing chiefly to the peculiar conventionality of the stitching, a characteristic arising from the relation which the latter bears to the ground fabric. The method of stitching impresses the work with a very distinctive character, causing a certain similarity to underlie the whole composition, which thus gains in breadth and unity. Tapestry weaving is a still finer example of the same thing. Most of the canvas stitches are so simple that a child can work them—in fact, children often learn to sew by working a sampler in cross stitch. Canvas work suits so many subjects, such as wall hangings, furniture coverings, carpets—many Eastern carpets are simply canvas work—pictures, heraldry, inscriptions, that for all these it is a particularly suitable method of

work. It is equally satisfactory for homely objects, such as pin-cushions, kettle-holders, or hand-bags, which are never prettier than when carried out in this way.

The frontispiece exhibits an interesting example of canvas embroidery. It forms one of a set of six wall panels, each measuring about $7\frac{1}{2}$ feet by 4. The work is English, of the XVIIth century. The panels have an interesting history. Not many years ago they were discovered in an old house in Hatton Garden, hidden behind several layers of wall paper, and in a very bad condition. Fortunately, careful cleaning has resulted in a most excellent restoration, and their future preservation is assured as they are now in the Victoria and Albert Museum.

The embroidery is carried out in various coloured wools on a coarse canvas ground material, in half a dozen or more stitches. These stitches have been chosen for the article upon the subject in the present number, so that the practical worker can follow them out in detail if she wishes. The ground is worked in rather fine, dark blue tent stitch. Most of the vari-coloured flowers and leaves are worked in larger stitches, and the variety in them is a rather uncommon feature of the

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work, for usually canvas subjects are carried out in one, or at most two stitches.

The design is based upon a row of columns which would be seen to much greater advantage with the complete set of panels in view. Around these columns twine stems

bearing foliage, fruit, and flowers. The intervening spaces are filled by a most entertaining collection of birds and animals, amongst which a baby elephant, a unicorn, hares, dogs, and English and foreign birds can be seen.

G. C.

EMBROIDERY FOR CHILDREN

CANVAS embroidery being the special subject of this number, we are naturally reminded of the sampler, and with it of the small workers who in past days, amongst other occupations, used to sew samplers, which by their execution gave evidence of a great pride taken in working them. Though tastes and fashions change, there must always be children really fond of making pretty things with their needles, and for such anything of this kind has a real fascination. Perhaps this is an appropriate moment to offer something in the way of embroidery for clever-fingered children to work.

A SAMPLER

The old sampler often seems to be a compromise between beauty and practical usefulness. The earliest samplers of which there is any record were simply an irregular jotting down of sprigs of flowers, birds, odd scraps of patterns, and so on, all apparently recorded for future reference. In spite of their entire lack of order and arrangement, these samplers made extremely pretty pieces of work, their attractiveness lying in the beauty of the detail and in the charming method of working. It is evident that some other much later samplers were deliberately designed with the intention of making pretty pictures, and this is the aim of the design in fig. 52, although, if need be, it can be put to other more practical uses. Here the name "sampler" hardly applies, for it samples variety neither of stitch nor of pattern ;

perhaps it applies in the sense of being an example of the skill and perseverance of the worker. It is intended to be a fairly straightforward piece of work for a child of about twelve years of age. There is a space at the end of the inscription, where, by leaving out the leaf design, initials and date might be fitted in, and there is every reason to advise the addition of these. Later on it may be an interesting record of youthful accomplishment.

The design is very simple. From an ornamental tub springs a flowering tree, in the branches of which two birds perch, back to back. The verse below, kindly supplied by a friend, relates the sad story of a quarrel. On each side of the tub extends a light trellis, above which some flowers are growing. The idea which this lower portion is intended to suggest is that the tree is standing in a flower garden.

Embroidered in dainty colours in cross stitch, according to the directions given below, this would make a pretty picture with which to adorn the wall of a nursery or other room. There exists, widely spread, a strong feeling against working embroideries for the set purpose of framing and hanging up, the objection raised being that they are wasted unless put to some more practical use, such as the embellishment of cushion covers, tea cosies, and the like. These are all well in their way, and they certainly look much prettier for the embroidery worked upon them, but walls also need decorating, and a fine piece of embroidery is nowhere shown to such

THESE BIRDS PERCHED ONFLOWERING TREE,
THIS SIDE AND THAT, AS ALL MAY SEE, ARE NOT
ON SPEAKING TERMS, FOR THIS ONE, WAKING,
STOLE AWAY, AND WHILE THAT SLEPT AT BREAK
OF DAY, ATE UP THE EARLY WORMS. ENET ENET

Fig. 52

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advantage, nowhere so easily seen, and nowhere so well preserved as when framed and hung upon a wall.

To carry out this sampler a suitable ground material must be procured. As a good deal of the ground will be visible, it should be one which is pleasing to look at. For this reason all hempen canvases are put out of the question, for with these the ground would have to be entirely covered. A linen of even mesh and fairly open texture makes a satisfactory ground from every point of view, and if hand-made, so much the better. The worked example from which the following description has been taken is carried out upon a greyish white coloured linen, one particularly adapted for the execution of this piece of work. A sample of it can be examined in Plate V, Part II, for the bag there illustrated is worked upon a similar ground. The design is entirely executed in cross stitch (see fig. 70) in Filo-Floss silk, the thread always being used double. The cross stitches are taken over two threads of the ground fabric in each direction. When completed, the design covers an area of about 18 inches by 14, nearly twice the size of the drawing. The exact dimensions of the finished work depend entirely upon the size of the mesh of the ground fabric. If it is of a coarse nature, a larger picture will result, and vice versa. With coarse material the working out is easier, but the effect will not be quite as good. To avoid working with double thread, "Mallard" Floss can be used singly in lieu of the Filo-Floss. Like other canvas embroidery patterns, this is most easily worked from the illustration, for to trace the correct outlines of the design on the material is a practical impossibility. When copying a pattern in this way, to commence from a central portion and work outwards is a safe rule to follow. In the present case, the tub might be worked first, next the stem of the tree emerging from it, and then the branches, etc., on either side. Strict accuracy is not necessary in some of the small

details, such as, for instance, the leaf forms. The flowers should be all alike, and the lettering should be very accurate. The latter could be commenced underneath the basket and worked in each direction outwards from this point.

The general scheme of colour is that of a combination of soft and delicate shades, of which there is much variety. The details are as follows:—*Flowers*, pale pink petals shading deeper on the edges, centres pale yellow surrounded by black. *Leaves*, three shades of green, the deepest on the outside. *Stems*, purplish brown on the outside shading to pale fawn in the middle. *Birds*, outlined in the darker blue; chest, pale blue with dark purple spots; back, dark blue; underpart of body, pale blue; tail, pale mauve; wing, dark and pale mauve at the shoulder, gradually shading to blue at the tip; head, dark blue; crest, dark mauve with pink tip; beak, black; eye, black with white outline; legs, dark mauve-colour with black claws at the end. *Tub*, chequered black and white with gold-coloured bands. *Trellis*, soft bluish green. *Flowers* above it, shaded blue, with yellowish green leaves. *Lettering*, dark mauve, with the first letters of all the words picked out alternately in pink and blue. Leaf design at the end, same colouring. *Border*, black, with alternate fillings of pink and blue.

KETTLE HOLDER

A rather less ambitious piece of work is illustrated in fig. 53. Being much smaller in dimensions, it takes much less time to work than the first described piece. It is worked on coarser linen and in thicker silk. The linen is of a yellowish white colour and very easy to work upon. The silk is Washing Filoselle, four strands thick. The design works out to about the size of the illustration and is intended for the decoration of a kettle holder. It could be adapted to any other little object by changing the lettering—for instance, "Pin Cushion" could replace "Five o'Clock Tea."

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The design divides itself into three horizontal bands surrounded by a narrow border. In the upper and lower bands the background is worked and the pattern left in

execute these is to work in horizontal lines to and fro, leaving the necessary spaces for the pattern. The chickens are outlined in dark brown, and relieved with a little pink on

Fig. 53

the plain material. In the centre this method is reversed, the pattern is worked and the ground is untouched. The uppermost and lowest bands are both worked in the same steel-blue colour. The best way to

each body, wing, and tail. They have black claws, beak, and eye. The bordering line on each side of the chickens is worked in brown. The outer border is carried out in deep pink and blue, used in alternation.

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Brown outlines and light fillings for the corner rosettes.

This design could be worked on the same linen in "Mallard" Floss, using single thread. The same colours and numbers apply to both kinds of silk. If ordinary canvas is found to be a more pleasant fabric for working upon, it can be used instead; but in that case both pattern and ground must be worked. By working in a yellowish white colour where the linen would have been left to show, somewhat the same effect would be obtained as with the linen ground.

The following Washing Filoselle or "Mal-

lard" Floss silks are required for working the small square:—

Blue	.	.	.	.	No. 62.
Pomegranate	Pink	.	.	.	Nos. 47-49.
Brown	.	.	.	.	No. 30f.
Black	.	.	.	.	No. 82.

The following silks are required for working the sampler:—

Birds	.	.	Nos. 149c, 149d, 10 and 12a, 51c.
Flowers	.	.	Nos. 51d, 51c, 51a.
Leaves	.	.	Nos. 21, 78g, 19.
Tub	.	.	Nos. 177, 178, 128.
Trellis	.	.	Nos. 20a, 178d.
Flower Sprigs	.	.	Nos. 20b, 78g, 12a, 11.
Lettering	.	.	Nos. 149d, 51d, 12a.
Border	.	.	Nos. 178, 51c, 12a.

G. C.

PLATE XIII. A CANVAS BAG

A SMALL bag, executed in simple canvas-work stitches, is illustrated in Plate XIII. The reproduction is exactly the same size as the original. It is worked in Filoselle silks on a single thread canvas. The main portion of the work is carried out in Florentine stitch (see fig. 72), the exception to this being that for the octagonal-shaped medallion in the centre tent stitch (see fig. 69) is used. The greater part of the design is based on diagonal lines. A golden-coloured network of trellis pattern is laid over the surface, and the intervening spaces are filled up with small geometrical devices all built upon a like basis of oblique lines. For the lower portion of the bag a shaded chevron pattern is arranged, to fill up the rather awkward shape occurring at that point. The object of all this oblique-line treatment is to make the design suit the method of work. Florentine stitch, a very simple variety to begin with, is much quicker in execution and more satisfactory in effect when worked in slanting lines. For the centre medallion it was neither possible nor desirable to use it—none of the

forms there could have been delineated with it; and the change in texture caused by the change of stitch makes a pleasant contrast. Work of this type can be thoroughly recommended to a beginner, as it is easy and pleasant in execution, and very effective.

A special feature of this piece lies in the mixing of the colours. Owing to working with several strands in the needle together, it becomes possible, just in the same way that a painter mixes the colours together on the palette, to mix strands of different colours in the needle, and so obtain exactly the required shade and tone. In almost every detail in this composition the strands are composed of two colours. In order to make the directions clearer, and to enable the worker to obtain the exact effect of the original, a tabulated list has been drawn up for reference and will be found at the end of this article. The colours do not vary in different parts of the design—that is to say, the same pink and the same green are used whenever either of those colours occurs. Therefore, when a colour is mentioned, a glance at the table will show the exact

PLATE XIII.

A CANVAS BAG.

(For particulars see the last page of this part.)

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proportions and colours of which it is composed. Throughout the working of this design seven strands are threaded in the needle for the execution of either the Florentine or the tent stitch.

It is not necessary, and indeed it is not possible, to trace a pattern of this kind on the canvas. Given a canvas of exactly the right sized mesh, the design is worked most easily by copying the counted stitches of the coloured plate. It is a very simple matter in the present case to count the stitches, and that is the way in which canvas-work patterns are usually carried out. Here, however, the colour as well as the pattern is given, so there is no difficulty whatever. The most straightforward method is to begin with the central device, though that is not the easiest portion. The green outer part should be worked first. Begin with the two tent stitches which form the lowest point of the eight-pointed star, and work upwards in horizontal lines, to and fro (see fig. 69 and description of tent stitch), keeping to the necessary outlines of the pattern. Next, work the gold-coloured disc in the same way, and finally the bird. The exact colours in which all these are worked will be found in the table at the end of this description. The black outlines of the bird and of the medallion are worked in small back or line stitches after the rest is completed, and therefore the outlining of the centre piece must not be put in until the surrounding pattern is done, or the former may get partly hidden.

The next part to be worked is the gold-coloured trellis pattern in Florentine stitch (see fig. 72). This is most easily started in the centre, immediately under the lowest point of the medallion. Having obtained the exact centre to start with, the rest follows as a matter of course. When this trellis is completed, the diamond shapes can next be filled in. The quickest way is to work all the ground first, which, as the reproduction shows, is arranged in alternate

oblique bands of blue and brown. The simplest plan, therefore, is to commence at the base and, working upwards, carry out the grounding of a whole band. After the ground is filled in all over the design, it only remains to work the little patterns, no two of which are alike. They are quite simple to copy from the coloured plate, and the colours are explained in detail in the table at the end. If the worker wishes, she can easily substitute other small fillings for these shapes. It is necessary, for the sake of the unity of the whole, to have a single line of the ground colour stitched all round the edge of the diamond shape, but after that the filling can be varied at will. No two similar colours should occur next to each other. The triangular shapes at the top of the bag and the remaining part of the base are next worked. They are both executed in the same way, in three distinct shades of blue. The number of rows of each shade can easily be counted in the plate.

When the embroidery is completed, the bag must be made up. The two sides, whether they are both of canvas embroidery or the back one of velvet, are tacked together, their edges having been previously turned in. They can then be fixed by an oversewing with blue silk. The lining is next fitted in and attached to the bag by means of a buttonholing in blue silk round the upper edge. The small metal rings are buttonholed over with the gold colour which was used for the trellis. Then they should be attached to the bag at the correct intervals. These rings, being placed at the points of the trellis pattern, carry out the fanciful idea of a network of gold supporting the bag. Finally, a cord of blue and black is sewn round the lower portion of the bag, ending up on either side with two loops; and another cord, made of gold and black, is run through the rings to form the handle.

By very slight changes in shape and pattern this design could be used to decorate a pin-cushion, a kettle-holder, a book-cover, or

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other object. For any oblong or square form there is no need to use the blue-shaded portion. The golden trellis could continue up to the edges, and in the half-diamond shapes either the shaded blue or half patterns could be used.

The following table gives the correct mixing of the strands of Washing Filoselle composing each needleful:—

For the blue ground,	6 strands of 20g and 1 strand of 30f
„ „ brown „	1 strand „ 20g „ 6 strands „ 30f
„ „ green patterns,	5 strands „ 162 „ 2 „ „ 86
„ „ „ in centre medallion,	5 „ „ 162 „ 2 „ „ 86
„ „ red patterns,	7 „ „ 23a
„ „ darker blue patterns,	7 „ „ 20e
„ „ lighter blue patterns,	6 „ „ 20c „ 1 strand „ 30d
„ „ mauve patterns,	6 „ „ 282 „ 1 „ „ 30d
„ „ pink „	6 „ „ 22 „ 1 „ „ 30d
„ „ gold trellis	5 „ „ 119 „ 2 strands „ 30d

For the gold disc in

centre	5 strands of 119 and 2 strands of 30d
„ „ shaded blue base,	
darkest part	6 „ „ 20g „ 1 strand „ 30f
middle part	6 „ „ 20e „ 1 „ „ 30f
lightest part	6 „ „ 20c „ 1 „ „ 30d
„ „ robin's breast,	7 „ „ 95
„ „ „ legs,	7 „ „ 23a
„ „ „ body,	
lighter part	7 „ „ 30d
darker part,	5 „ „ 30f „ 2 strands of 122c

The following shades of Washing Filoselle silk have been used in carrying out the bag:—

Blues		Nos. 20c, 20e, 20g.
Browns		Nos. 30d, 30f, 122c.
Greens		Nos. 162, 86
Reds		Nos. 23a, 22
Mauve		No. 282
Gold		No. 119
Orange		No. 95
Black		No. 82

For no shade is more than one large skein of Washing Filoselle required, and in some cases a small one is enough.

G. C.

COLOUR EMBROIDERY AND ITS TREATMENT

EMBROIDERY as an art of design may be considered from many points of view, but none of these are more important than those of colour and its treatment. It is, indeed, to colour that decorative needlework owes its chief charm, and in no direction is the influence of controlling taste more essential, and in its absence the most elaborate workmanship and technical accomplishment are apt to be wasted.

The choice and treatment of colour must naturally depend, in the first place, upon the object and purpose of the work, which would, of course, decide the scale and motive of its pattern.

As applied to costume, in which direction we find some of its most delicate and beautiful examples, nearness to the eye, the construction of the garment, and the proportions of figure would have to be considered.

The Russian peasants have a form of frock or long blouse worn by young girls,

which affords an instance of effective use of frank and bright colour upon a white ground. The garment itself is of homespun linen. It has a square opening for the neck, and is put on over the head, like a smock (fig. 54). The sleeves are quite simple, full on the upper arm and narrowing to a band on the wrist. The skirt, which falls straight from the shoulders, is decorated with a series of horizontal bands of pattern worked in cross stitch, the principal colours being red and green, colours which always tell well upon white. The square-cut opening at the neck and the cuffs are emphasised by embroidered pattern of similar kind, but on a smaller scale.

The garment is ingeniously adapted to the growth of its wearer by adding extra rings of pattern to the skirt, and by enlarging a square piece let in at the armpits.

The Hungarian peasant women are most admirable embroideresses, and in their festal costumes display an extraordinary wealth of brilliant colour, employing, like the Russian,

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Fig. 54

principally the cross stitch on white linen. They are fond of decorating the ends of their

pillow-cases, which are piled up one upon the other on the bed, usually set against

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the wall in their cottages, so that only the outside ends show, and these alone are embroidered. Both the patterns, which are traditional and have an Oriental character, and their colours show a strong decorative sense and natural taste, many of them being worked in a single tone of red and blue, always effective on white. In some parts short sleeveless leather jackets lined with sheep's wool are worn. These are made

by appliqué embroidery in black and green, the chief points of decoration being the collar, the cuffs, and the hem.

In the Montenegrin section of the Balkan States Exhibition at Earl's Court last year there were some charming skirts and blouses embroidered with gold thread and colour in bands. The constructive points, such as the neck opening, the junctions of the yoke and sleeves, sometimes the sleeves themselves,

Fig. 55

incredibly gorgeous in colour by a kind of combined appliqué and stitch embroidery, the vivid greens, reds, blues, and purples being kept in their place by the broad white of the shirt sleeves which flank them on each side when worn.

More austere arrangements are, however, found. There is a large, heavy overcoat with hanging sleeves and a deep collar worn by the Hungarian farmers, made of white wool. This is ornamented most judiciously

were richly ornamental with designs in gold and colour with excellent effect.

Good examples of treatment of rich colour in combination with light pattern are to be found among Cretan embroideries. The decoration in bands of the ends of the muslin scarves relieved with silver and gold thread often recall the effect of the illuminated borders of XIV- and XV-century manuscripts, having a delightfully gay and sparkling effect. They are examples of the

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harmonious effect produced by the arrangement of several different colours in the same pattern, grouped around a central feature which forms the dominating note; this is often in the form of a large red flower with a gold centre, and this is surrounded with smaller detached star-like flowers and formal cypress trees in leaf-shaped enclosures of gold on silver thread, the design being repeated, with slight variations, to form a

band on border of pattern decorating the ends of the scarf. In a sample before me eight colours are used, besides gold and silver thread. The colours are: 1, red in centre flower (a light vermilion); 2, crimson (sometimes also magenta); 3, pink (pale salmon); 4, orange; 5, light (lemon) yellow of greenish tone; 6, olive (dark); 7, pale blue; and, 8, dark blue (fig. 55).

WALTER CRANE.

(To be concluded in Part V)

PLATE XIV. THREE BORDER DESIGNS

IN Plate XIV three narrow border designs of different types are illustrated. Decorated bands can be applied in a variety of ways. For instance, it is not always necessary to place them at edges; a bag or a cushion may have one or more bands of decoration running across it horizontally or obliquely (see figs. 56, 57). Strips of embroidery can be used for the enrichment of various details of dress, such as collars and cuffs, or they may be inserted as shoulder pieces or down the fronts of blouses. They can be used as edgings for table covers, hangings, or muslin blinds; or again, they may decorate narrow objects, such as curtain ties or bell pulls. These are a few suggestions for their application, but others will easily be thought of, for no type of design is applicable to so many uses as the band type.

BORDER IN BLUE AND WHITE

A simple and quickly worked border is illustrated in the upper portion of the plate. It is slightly reduced in size, the original measuring one and a half inches in width. The design is specially intended for the decoration of a blouse, and fig. 58 is an illustration of one way in which the ornament might be applied. The shaded bands represent the embroidery, which, down the front and sleeves, would be used as an

insertion. By adding a finely tucked yoke, back and front, a very pretty blouse would be made. A suitable ground material would be fine linen batiste or white silk.

In the reproduction the embroidery is carried out in "Filo-Floss" silk, in white and three shades of blue. The ground material is linen batiste. The stitches used are buttonhole, stem, chain, and satin (for the description of which see Part I). The first portion to be worked is the open buttonholing which forms a kind of network over one-half of the design. This is easily and quickly done, with a strand of the palest blue threaded in the needle. Commence at the top of the band, and work along its length a line of open buttonhole stitches, spaced about one-eighth of an inch apart. The succeeding rows are worked in the same way, the stitches always being taken into the heading of the last row and placed just between those above. This buttonholing can be worked alternately from left to right and from right to left. When this is completed, enclosing lines of white are worked in stem stitch all round the edges of the buttonholed part, double thread being used. The little flowers decorating the insides of the arches can next be worked—first, all their centres in white satin stitch in single thread, then the petals, which are composed of five single chain stitches, worked in the

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deepest blue. Finally, the stems and leaves are executed in stem stitch in the middle blue colour. If preferred, the part which is filled in with a network of open buttonholing could be covered lightly with an open darning stitch (see fig. 68), or any other form of stitching that gives the effect of a pervading blue colour to that part of the border.

As an alternative colour scheme, this design can be carried out in white and three shades of any colour the worker fancies. Washing Filoselle or Stout Floss silk would work it quite satisfactorily, if they are preferred to the "Filo-Floss."

The following shades have been used in the illustration:—

Saxe Blue .	No. 218,	for the open buttonholing.
" "	No. 219, "	stem and leaflets.
" "	No. 220, "	flower petals.
White .	No. 177, "	flower centres and outlining.

BORDER IN GOLD AND BLACK

In the middle of the plate is shown another embroidered band. The design is divided into panels which repeat along its length. In each of these occurs an S-shaped stem bearing conventional flowers, berries,

Fig. 56

Fig. 57

and leaves. Two repeats of the pattern are given, which can be continued exactly as illustrated until the requisite length is obtained. If variety is wanted, the flowers and buds can be varied within certain limits at each recurrence of the pattern. This type of design is applicable to almost any-

thing; it would be suitable for dress decoration, or it would look pretty arranged in bands across a cushion, as suggested in fig. 57. The band is slightly reduced in size in the reproduction, the original measuring two and three-quarter inches in width. The embroidery is carried out in "Filo-Floss" silk

Fig. 58

upon a ground of white semi-transparent linen batiste, but an ordinary fine linen could be used instead of this.

The colour scheme is very simple, consisting of black and two shades of gold. The stitches employed are chain, buttonhole, satin, double back, and French knots (all of which were described and illustrated in Part I). The silk is used in single thread throughout.

The stems and tendrils are carried out in chain in black. If the semi-transparent material is used, there must be no passing from one point to another across the under surface. When working the various little offshoots from the main stem it is well to run the thread back on the under side along a line of stitching in order to reach the necessary continuation point, rather than to fasten off each time and begin again. The leaves are all worked in double back stitch, in the deeper shade of gold. The small berries are in buttonhole, in the paler shade of gold. To work them, a tiny hole is first made with a stiletto, and then the buttonholing is worked in wheel fashion

PLATE XIV.

THREE BORDER DESIGNS.

(For particulars see the last page of this part.)

round and into it. These berries should be small and all of one size.

The petals of the flowers are worked in buttonhole or satin stitch in the deeper gold. The centres are always worked in the paler shade of the same colour in either French knots, satin or buttonhole wheels. All the flowers are accentuated by the addition of some black. The necessary touches can be added on the outer petals, stamens, or on some other part. It does not matter in what stitches flowers and buds are worked, although it may be as well to avoid the double back stitch in order to give some contrast in texture between leaf and flower; but it is important that they should have the right proportion of each colour used upon them. The bars, running diagonally across the band and dividing each repeat of the pattern from the adjoining one, are made up of a series of buttonhole wheels, worked in the deeper shade of gold. Like the berries, they are made by buttonholing round a small hole made by the stiletto. They gradually increase in size towards the centre of the band and decrease towards the edges. To look well, the line which they form must be very straight. A small French knot is placed on either side of the wheels at the point where they touch each other, and also one at the top and another at the base of each bar (see the plate).

The edging is composed of detached semi-circles of the deeper gold colour joined together by a curved interlacing black line, below which is a row of small wheels in the paler gold. These last are worked exactly like the berries in the other part of the design. When beginning the border, the half-circles should be worked first. They are similar to those composing the slanting bars, but only a half-circle is buttonholed instead of a whole one. Next, the black interlacing line is worked in chain, and finally the small wheels below.

An alternative colour scheme might be dark blue replacing the black and two shades

of orange replacing the gold, or the pattern might be carried out in some light colour on a dark ground, or all in white upon a white ground. In this last case the ground would be much prettier if it were transparent. Washing Filoselle or Stout Floss would be alternative silks. The "Filo-Floss" silks used in carrying out the piece of work illustrated in the plate are as follows:—

Golds	:	:	:	:	:	Nos. 127a, 128a.
Black	:	:	:	:	:	No. 178.

BORDER WITH RED FLOWERS

The border reproduced in the lower part of the plate is decorated with a conventional flower, which springs at regular intervals from either side of an undulating central stem. The ribbon-like edging is arranged to fill up the spaces between the flowers by twisting it into a simple interlacing knot at the necessary points. This design would be suitable for decorating a workbag in the manner suggested in fig. 56, or for a bell-pull, curtain, table-cover, or other things of the kind.

The work is executed in "Filo-Floss" on a white linen ground, and single thread is used unless otherwise stated. The stitches employed are satin, chain, double back, buttonhole, French knots (for all of which see Part I), and coral (for which see Part III). The reproduction is rather less than the size of the original, which measures two inches in width.

The flowers are worked in several shades of red, graded from dark red to pale pink. The three petals are filled in with lines of chain stitch, commencing at the outside with a deep shade, next a medium, and then a paler shade (Nos. 38, 37, 35 respectively). The portion of the flower between the petals is worked as follows:—First, a line of chain in the deep red colour along the traced line, inside this a close row of buttonhole stitching in the palest pink, and outside it a band of open buttonhole in double thread in the

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brightest shade of red (Nos. 39, 37, 33a respectively).

The heading of the buttonhole should be, in both cases, against the chain line. By working the outer band in the open stitch a pretty serrated edge is given to that part of the flower. The calices are worked in satin stitch in the deepest shade of green. It may be the easier plan to work them before the other part of the flower, in a dark shade of green. The leaves are first outlined with open buttonhole in the brightest green, in similar fashion to the flowers, and then filled in with double back stitch in the palest green. Double thread is used for both the filling and the outline. The flower stalks are executed in chain, a double line of it at the base and a single line from the point where the leaves spring off. The colour is the same as that used for the outlines of the leaves. The main stem is first outlined with dark blue in chain, and then filled in with double back stitch in the second palest shade of green, double thread being used.

The detached flowerets which occur at each turn of the central stem are made up of four single chain stitches (see fig. 33, Part II) arranged in the form of a cross. They are worked in the brightest shade of red (No. 37), and have a dark blue French knot in the centre. This knot can be put

in when the outer edging is worked, for it is of the same colour. This will save the trouble of commencing and finishing off a thread to each floweret. The edging is commenced by working along the centre a line of coral stitch, in buff colour with double thread. The knots made by this stitch should be placed rather close together. Across the line of coral stitch there is a simple oversewing in the deepest shade of red, one stitch being overcast between each knot. This simple process gives the chequered pattern to the edging. To complete the border, on either side of the coral stitch a line of chain stitch is worked in dark blue. For alternative silks, Washing Filoselle or Stout Floss may be used. The colour scheme might be varied by changing the colour of the flowers and arranging the rest of the design in accordance with the change.

The "Filo-Floss" silks used in carrying out the portion of the border illustrated are as follows, the quantities required, in the case of all three borders, depending on the length of the border which they are intended to work :—

Dark Blue . . .	No. 44.
Buff . . .	No. 123.
Reds . . .	Nos, 39, 38, 37, 35, 33a.
Greens . . .	Nos. 178e, 178g, 178d, 178c.

G. C.

LETTERING IN EMBROIDERY

AMONGST the various items of the embroiderer's stock-in-trade, lettering takes a prominent place, for it can be both fine from an artistic point of view and useful in many practical ways. It may be at once decorative and at the same time a means of conveying information. From it we may learn, while looking at the work, who are the various persons repre-

sented in some scene, or who has executed, or has been donor of, some famous masterpiece. The practical uses of it for marking, and possibly thereby decorating, personal and household linen are too well known to need enlarging upon.

The decorative quality of lettering has always been recognised, a fact which is perhaps realised most forcibly when the

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inscription is in some unknown tongue. Arabic inscriptions seem to have had a peculiar charm for the designers of the woven fabrics of Southern Europe in the Middle Ages. The fact that but few people could read them mattered little, as there is

upon the wall. Most often, however, lettering is used in conjunction with other kinds of ornament, and it is always an attractive addition to floral and many other kinds of work (see Plate I, Part I, and figs. 52 and 53 in this number).

Fig. 59

always a certain amount of romance about undecipherable inscriptions. Indeed, this very fact brought about a development of the decorative inscription which may be

difficult to believe without demonstration, for the letters lost their original shapes, and degenerated, from the point of view of lettering, into mere scribbles, like children's "pretend" writing.

Fig. 60

Embroidered lettering can be of sufficient importance and beauty to form the sole subject of a composition. Some favourite lines of prose or verse, daintily embroidered, can be made a most interesting and satisfactory piece of work to frame and hang

P

A search amongst any representative collection of old work will always reveal many different ways of making good use of lettering.

It may be that a text of Scripture forms the border to a chalice veil; a narrow altar-band decorated with a row of little flowering trees has, running along its length just beneath the branches, the names of half a dozen saints

Fig. 61

in pretty Gothic lettering; apostles and prophets portrayed on the XIIIth-century copes are often accompanied by a flowing scroll on which their names are quaintly inscribed. The sampler worker seems to

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have put lettering to as many diverse uses as possible. There is the interesting signature, for example, "Sarah Pelham finished this sampler in the sixth year of her age." (In the accompanying verse she refers to this age as her "prime"). These verses, though very decorative to the sampler, are not usually of high poetic quality, but occasionally the writing gives historical information. Mary

Without this knowledge it is impossible to design good monograms, or to make any decorative use of it whatever. Books upon the subject* will give much information and supply many alphabets to choose from, but besides looking up the subject in books it is necessary to study embroidered examples in order to learn which forms are best suited for being portrayed with the

Fig. 62

Minshull tells us "There was an earthquake on the 8th of September 1692 in the city of London, but no hurt though it caused most part of England to tremble." For marking purposes, the alphabet is nearly always present in samplers.

To make lettering truly ornamental it is necessary to be well acquainted with the shapes of several types of fine alphabets.

needle. Some of the lace and embroidery pattern-books supply excellent alphabets. The alphabet illustrated in fig. 59 is taken from a late XVIth-century pattern-book written by an Italian, Giovanni Ostaus. This one has been especially arranged for cut work, but by omitting the squared background and decoration, it can be used for any purpose for which one of Roman

* "Writing, Illuminating, and Lettering," by E. Johnston; "Alphabets," by E. F. Strange.

type is required. It is interesting to know that one such as this was actually worked, a sampler in the Victoria and Albert Museum * having a beautiful cut-work alphabet upon it very like that in our illustration.

Fig. 63

Gothic lettering is very largely used in embroidery, in both ancient and modern work. The rather indistinct nature of the characters, to eyes trained to Roman type, is sometimes advantageous. Lettering too plain and clear can draw too much attention to itself and so be a disturbing element in the design. Fig. 63 illustrates an alphabet of Gothic type taken from a XVIth-century pattern-book by N. Zoppino.

So far we have discussed straightforward lettering. There are, however, other ways of making very good uses of it. The idea

Fig. 64

of expressing a great deal by means of either single or grouped letters or signs has always attracted the attention of artists, and many are the examples of ingeniously arranged letters and signs forming some monogram

or device. These have been made use of in all arts, in those of the highest order as well as in the lesser arts. Paulus the Silentiary, when describing the decoration of the great church of Sancta Sophia at Constantinople which was built by Justinian in the VIth century, says, "On the middle panel of the sacred screen which forms the barrier for the priests, the carver's art has cut one letter that means many words, for it combines the names of our King and Queen (Justinian and Theodora)." Byzantine monograms, such as the above would be, are most excellent pieces of letter arrange-

Fig. 65

ment, but owing to being composed of Greek characters they have no use in the present day. Perhaps the only Greek monogram that conveys any meaning to us to-day is that of our Lord (see fig. 60), composed of the Greek letters X and P. In this example there are further the symbolical letters Alpha and Omega, "the beginning and the end," placed on each side. This example occurs on a sarcophagus in the church of St. Apollinare in Classe, near Ravenna. Similar examples of monograms in Roman characters can easily be found. Take, for instance, the signature of Pope Paschal (see fig. 61) which

* No. 269, 1898.

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can be seen carved upon the marble slab above the entrance of the small chapel of San Zeno in the church of San Prassede in Rome. This easily deciphered signature contains the letters of the name ingeniously packed into a small space.

It has long been customary to use signs with letters, or signs alone, when composing a device to represent some name. The rebus, the name by which this picture-writing was known, always had some connection with the owner's name, and sometimes it was a pun upon it. A tree, rising from a

suitable for portrayal by the embroiderer's art. A badge or a coat-of-arms often makes a good subject for the ornamentation of cushions, bags, or furniture. A monogram can be so prettily arranged that it may well be the only decoration worked upon some household object. The crowned monogram (built up of cursive lettering and decorated with surrounding foliage) illustrated in fig. 62 is a beautiful example of its kind. Worked in white thread in chain stitch and knots, it decorates the corner of a white cloth of late XVIIIth-century French work,

Fig. 66

barrel, picturesquely represented the name Grafton (Graft tun). Similarly, the four letters I M O R placed on the four sides of a barrel represented I. Morton (I. Mor tun). This occurs on the central tower of Canterbury Cathedral. Carved on the outside of Abbot Islip's chapel in Westminster Abbey is a carving in relief of a man falling from a tree, also an eye and a slip of foliage, the Abbot's name being thus pictured in two different ways in the same rebus.

There is no reason why lettering of all kinds and picture-writing should not be put to more uses nowadays, and they are especially

in the Victoria and Albert Museum. The letters A M V P T can be read in it.

There are various ways of decorating letters and monograms. It may be floral work or interlacing strap work that surrounds them, or they may be placed against a diaper patterned background. Fig. 64 shows a simple floral decoration to the letters A M. The original is worked in buff-coloured silk on a black ground, chiefly in buttonhole stitching. Fig. 65 illustrates the letter L decorated with interlacing curves and simple flowers. The letter in this case is worked in satin stitch in black thread, and the

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interlacement in a pale indigo blue. Both these examples are of Flemish XVIIIth-century work.

Having decided that lettering must be of a good type, and, if decorated, suitably done, the next question for the practical worker is, what are the best stitches in which to execute it? There is the ubiquitous satin stitch, which we think has earned a well-deserved rest from this as well as from other kinds of work. It may be supplanted by double back, double or open chain, and many other stitches (see illustrations). Applied work is a suitable and easy method to use if the materials are well chosen. Fig. 67 illustrates some applied work lettering. It is taken from the mitre of William of Wykeham. The letters are of crimson silk upon a ground of silk that once was white, but which now has faded to buff colour. All the stitches and methods employed in fine white work are applicable to this use, such as, for example, the back stitch fillings and *à jour* work. Samplers show how well cross stitch works for any kind of lettering purpose. Many different kinds of alphabets can be found in them; in fact, cross stitch is such an excellent medium that it can almost make bad lettering look well. Fig. 66 illustrates a cross-stitch alphabet and figures taken from a sampler worked by Mary Bywater in 1751. This may be useful either for inscriptive verses or for purposes of marking.

Instead of devising a monogram, the worker may prefer to make use of some simple device. This may appeal to some as a more subtle means of marking ownership than plain lettering. To see what could be made of one's own name, or the names of friends, in this way might be an entertaining

experiment for ingenious designers. The device should have some sort of connection, either be a play upon the name, or be in some other way characteristic of its owner. It should both please the eye and tickle the intelligence. A girl's Christian name often suggests a flower; if it be Margaret, Lily,

Fig. 67.

or Rose, the sign is a very simple matter. A Catharine may borrow her namesake's wheel, a Cecilia may make use of a musical instrument, and so on. If the surname is Partridge or Martin, a charming device is readily made. A Robinson may adopt the badge in the centre of Plate XIII if she approves of it.

G. C.

PLATE XV. A SQUARE TABLE-CENTRE WITH A DARNED GROUND

IRREGULAR darning forms a distinct feature of the design, for a table-centre or cushion, illustrated in Plate XV. The design has a geometrical basis of interlacing bands enclosing sprays of conventional bluebells and Michaelmas daisies, the intervening spaces being filled in with concentric lines of irregular darning. The original, which measures eighteen inches square, is carried out on a rather loosely woven cream linen in "Mallard" Floss silk,

Fig. 68

very delicate shades of plum and steel-blue being used for the darning, which give it an opalescent effect. For the flowers, a deeper shade of steel-blue and a gold are employed, and the colour scheme also includes two shades of blue-green, two of yellow-green, two of stone-colour, and a red.

Five stitches are used in working this design—stem, chain, herring-bone or double back, French knots (all of which have been explained and illustrated in Part I), and darning, which in this particular case is merely a kind of running stitch (see fig. 68), most of the silk lying on the surface, and single threads of the linen being caught up here and there at irregular intervals. The floral sprays are worked entirely in stem stitch, with the exception of the daisy centres, which are formed of French knots. The stem stitch, in this instance, should be worked with the thread on the right-hand side of the needle, and, throughout the design, care should be taken to keep the

stitches very small and neat, so as clearly to define all flower and leaf shapes. This is particularly essential when working on a loosely woven linen, as the open texture tends to exaggerate any raggedness of outline.

For the bluebell sprays, the deeper steel-blue and yellow-greens are employed. The flowers are outlined first, all points being made very sharp; then the leaves and their central veins in the paler green, the stems being worked with the darker shade. Lastly, touches of dark stone-colour are added, in single stitches, to form the calices of the flowers.

Blue-greens and gold are used for the daisy sprigs, gold outlining the petals of flowers and buds, pale green the calices, leaves, and their central veins, and a darker green the stems. The little offshoots are single stitches worked in pale green alternately right and left of the stems. For the flower centres dark red silk is introduced. A ring of small French knots (silk wound once round the needle), placed close together, is worked on the circle shown in the design; within this, and as close to it as possible, is a second ring. This leaves a small circular space which is easily filled with three large French knots in dark stone-colour, made by winding the silk twice round the needle.

The interlacing bands are carried out in the lighter stone-colour in herring-bone stitch, worked openly. The back stitches, to be seen on the reverse side, are about three-sixteenths of an inch in length; but it will be observed that those taken on the inner edge of the curve should be the least degree shorter than those on the outer edge, in order to keep quite even. In working this stitch the needle must pick up the material well outside the line of the tracing so as to cover it, and care should also be

A TABLE-CENTRE.

(For particulars see the last page of this part.)

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taken to keep the spacing quite regular in turning the corners.

The darning follows the shape formed by the herring-bone bands, and is worked from outline to centre. As strict regularity is not desired, the spaces between the lines need not necessarily be equal, but may vary from an eighth to three-sixteenths of an inch, and the stitches themselves can be anything up to three-eighths of an inch in length. The larger spaces are commenced with three lines of the deeper plum-colour; then three of the paler steel-blue, three of pale plum, and again three of blue, the last of which forms a tiny square in the centre. In the smaller spaces, three of deep plum, three of pale blue, and a little triangle of pale plum are sufficient to cover the ground.

The two flower colours are repeated in the border, which has, as its foundation, a line of zigzag chain stitch (see Part II, page 35) in deep steel-blue. Along the outer edge, short stitches connect the points with the traced line, and, being worked alternately with the chain stitches, serve to keep them in position. Each point on the inner line should be caught down with the needle as it commences the next stitch, for if this is not done, the sharpness of the angles will probably be lost. A French knot in gold (silk twice round the needle) finishes every point on the inner line, and the design is completed by a line of stem

stitch worked in dark stone-colour on the outer edge of the border.

Quite a different effect might be produced by using brightly coloured silks, but in that case it would be necessary to work the flower-sprays more solidly, or they would be in danger of being overpowered by the darning. Again, darning might be replaced by cross stitches worked on the threads at regular intervals to form a very simple filling, or by any open filling, such as those shown in Part III, pages 65-7.

The design as it stands could be used quite well for a cushion cover, though a cross-stitch filling, being more durable, would perhaps be more suitable than darning for that purpose. The chain-stitch border would not be amiss as an edging; but, if it was not deemed a sufficient finish, a cord in the same colours might be substituted for it.

The following is a list of the shades of "Mallard" Floss silk used in working out this design:—

Steel-blue . . .	{ No. 60a . . . about 4 skeins
	{ No. 60x . . . " 2 "
Yellow-green . . .	{ No. 160 . . . " 4 "
	{ No. 162 . . . " 1 skein
Stone-colour . . .	{ No. 206d . . . " 1 "
	{ No. 206a . . . " 4 skeins
Plum	{ No. 73 . . . " 2 "
	{ No. 73x . . . " 1 skein
Gold	No. 119 . . . " 2 skeins
Blue-green . . .	{ No. 233b . . . " 1 skein
	{ No. 233d . . . 4 strands only
Red	No. 23a . . . 4 " "

L. TOPHAM.

STITCHES—IV

TENT STITCH—CROSS STITCH—GOBELIN STITCH—FLORENTINE STITCH—EYE STITCH—ROCOCO STITCH

A FEW of the stitches used in canvas embroidery are to be described in the present number. Besides the many varieties which are peculiar to this sort of work, a number of others can be

Fig. 69

adapted for use on a canvas ground. The chief characteristic of this kind of embroidery is that the stitches always bear some definite relation to the ground fabric, owing to the fact that they are executed on the counted threads of the warp and woof. This gives them a marked regularity which has a very decorative effect. Regularity being a special characteristic, it becomes particularly necessary to stitch with great precision and exactness. Although it is possible to do some sorts of canvas work in the hand, that done in the frame is generally more satisfactory from the point of view of technique. The direction of the stitching at the back of the work has a great influence upon the appearance of the front, and so, in order to obtain a perfect effect, it is necessary to pay special attention to the reverse side. When carrying out the stitching in lines alternately from right to left and from left to right, the working of the stitch, when commencing a fresh row, must be reversed in such a way that on the under, as well as on the upper

side, there shall be no variation in the direction of the stitching. This is much more easily contrived when the work is done in a frame. In carrying out a shaded pattern it is not possible to adhere to this rule as faithfully as with a plain ground. The most suitable patterns, however, are those which permit of fairly regular execution.

In all-over work it is important that no vestige of the canvas should peer through between the stitches, a defect which results from using too fine a thread for working. On the other hand, if the thread is too thick, the work will be clumsy and irregular. Perfection in this respect lies simply in the correct adjustment of the size of the thread to the mesh of the fabric. There is a great deal in choosing the right materials for

Fig. 70

working with and upon. Many different sorts of canvas can be obtained. One of the main distinctions amongst them is whether they are woven in double or single threads. Both kinds can be obtained in great variety. There are some in which the

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ground can be left unworked, such as the sampler and hand-made canvases.

Besides wool and silk, the metal threads for working must not be forgotten. They are particularly good to use upon canvas, owing to the ease with which they can be passed to and fro through the material. In many old examples the background is worked entirely in gold or silver, and the pattern in silken thread.

After the first three or four well-known stitches it becomes difficult to decide which next to describe. The question shall be settled by detailing all those which have been used in the piece of work which forms the frontispiece of the present number. They comprise tent, cross, Gobelin, and Florentine, which may be called the four commonest canvas stitches, and also eye and rococo, which are two fanciful and pretty varieties. If the reader is acquainted with these, it is fairly easy, at any rate with the aid of a magnifying glass, to distinguish in the reproduction which has been used on each detail. The dark blue fine tent stitch on the background is perhaps the only portion that cannot be readily made out.

Before the practical description of the stitches is commenced, it may be as well to explain that the illustrations are intended to be clear working diagrams. They do not aim at giving the actual appearance of the worked stitch. If they did this, none of the ground material would show between the stitches. The relative size of the canvas threads to the working threads has been deliberately falsified in order that the worker may be enabled to see through to the back, and thus follow the passage of the thread throughout its course.

TENT STITCH

Almost better known by the descriptive name of *petit point*, this little stitch is perhaps the most beautiful of the canvas group. Though its appearance is so well known, it may be that the correct way of

working it is not equally familiar. Fig. 69 illustrates the right way. The worker should, when possible, commence at the lower left-hand corner of the space to be covered. The needle brings the thread through in the upper right-hand corner of the working square, passes it diagonally across one vertical and one horizontal thread of the canvas, and takes it through to the back in the lower left corner. Next, the needle passes, on the under side, across one horizontal and two vertical threads, and then comes up in correct position for the second stitch. Upon reaching the next row, which is worked most naturally in the reverse direction, the needle brings the thread

Fig. 71

through in the lower left-hand corner of the working square, and passes it to the back in the upper right-hand corner, and so on (see fig. 69). Thus, by reversing the method of working, the stitches are kept alike at the back in spite of the change in the working direction. This stitch is suited to very fine work, and lends itself most excellently to shading. It is necessarily worked on single-thread canvas, and usually on one of fine texture, for it would be difficult on a coarse material to cover the ground entirely. A device sometimes used to overcome this difficulty is to lay a thread horizontally along the line and work over it. Many charming little hand-bags and pin-cushions, and the *petit point* pictures of the XVIIth and XVIIIth centuries, supply us with examples of the possibilities within reach of this simple little stitch.

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CROSS STITCH

Cross stitch is most easily worked upon double thread canvas, although it is used upon the single as well. A glance at the diagram will show that the double is much less trying to the eyes, because of the necessary counting of the threads, which, though al-

Fig. 72

most unconsciously done, must nevertheless always be going on. The loosened stitch in the upper part of fig. 70 illustrates the correct way of working. A quicker way, which is often used, especially in grounding work, is to carry out a row of half-stitches, and then cross these on a return journey. The difference in the appearance is that a more line-like effect is given by the latter method. When worked in this way, the best result is obtained by treating it in just the same way as tent stitch. The stitch is shown to perfection when it has a square, mosaic-like appearance, which is best obtained by completing each one before commencing the next. It is used for work of all kinds and sizes; it can, like tapestry, be used for large wall hangings, for picturing great historical subjects, or it can be called upon to embellish a kettle holder.

The fanciful cross variety, illustrated in the lower portion of fig. 70, is used for working out two or three of the details in the frontispiece (one situated slightly above the centre, and another near the top). First

a large cross stitch is worked diagonally over four threads of canvas in each direction and the four corners of this are then crossed by means of single or half cross stitches. This makes a pretty squared stitch for fillings, and it also illustrates how easy it is to build up variations on the main types.

GOBELIN STITCH

In working and in appearance this very much resembles tent stitch, the difference being that it is slightly longer. The correct method of working it is to pass the thread over two horizontal threads and over one vertical (see fig. 71). In every detail the execution is similar to tent stitch. Many variations can be developed by altering the number of threads in either direction over which the stitch passes. For instance, sometimes it is an upright stitch, passing over just two horizontal threads of the ground. It is used thus as a couching stitch to cover, or partly cover, laid threads. A rather common variation is called "encroaching Gobelin." In this the stitches of each succeeding row encroach just one thread of the canvas upon the row before (see fig. 74), and they must be of greater length than usual. In the frontispiece this variety is used instead of the ordinary.

Fig. 73

Fig. 74

Gobelin is well suited to shaded work, and it is not quite as tedious as the smaller tent stitch. Sometimes a background is carried out in the Gobelin with a pattern in tent stitch.

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FLORENTINE STITCH

This variety (known also as Irish stitch) is one of the easiest and quickest of canvas stitches. The first-mentioned name perhaps describes it best, because it is the stitch used in the well-known Florentine work, in which the design is entirely based on shaded chevron lines. The stitch, an upright one, is usually taken over four horizontal threads of the canvas ground. It is worked most easily and economically in diagonal lines (see the left-hand diagram in fig. 72). There it has been taken over only two threads, in order to show the workers of the embroidered bag illustrated in Plate XIII exactly how to carry it out. It matters very little over how many threads the stitch passes. Perhaps with the smaller one it may be a little more difficult to hide the canvas ground. Sometimes in carrying out a pattern it may be more practical to work horizontally. In that case the stitch must be worked as in the right-hand diagram in the figure. In the succeeding rows the stitches are placed between those of the row above, thus each row partly encroaches upon that on either side. A pretty and common

Fig. 75

variety of this, known as Hungarian, is shown in fig. 73. It is worked horizontally, and is taken successively over two, four, and two threads of the ground fabric. It forms an excellent and rapid grounding stitch, and it can equally well be used for a shaded filling, in which latter way it is frequently used in the frontispiece. This, like many of the canvas stitches, covers a surface with a simple patterning which is very pleasing in effect. Shading carried out through the medium of a pattern like this gains by its means just enough conventionality to avoid too naturalistic

an effect, and that is partly why it is so satisfactory.

Hungarian stitch makes a pretty and quickly worked ground for a pattern in fine tent stitch. In the Victoria and Albert Museum there is an example of this, a basket

Fig. 76

of flowers worked in fine tent stitch with a very pretty ground of Hungarian.

EYE STITCH

The variety illustrated in fig. 75 is used with good effect on several of the details in the frontispiece. Occurring over the surfaces worked with it are regularly repeating squares with tiny holes in the centre, by which it can easily be identified. It is said to be commonly used on Icelandic embroideries, and sometimes it is seen on English samplers either for the lettering, in place of cross stitch, or for interesting little geometrical patterns such as that illustrated on this page, fig. 76, which was taken from a source of this kind.

The working can be followed out in the diagram. Sixteen stitches, four to each side of the square, come through in alternate holes of the canvas ground in such a position that their outer extremities form

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a square on the material. They all pass through to the back at the same point in the exact centre of the square, and by so doing considerably increase the size of the hole in that place. The outside is

Fig. 77

next finished off by a row of sixteen back stitches, four to each side of the square. In fine work, such as sampler lettering, these back stitches are often omitted, but in work done on a large scale they distinctly improve the appearance. It is a very pretty stitch for mosaic-like patterns or for any that are based on chequers. When used for a shaded surface, it may sometimes be necessary, in order to obtain correct drawing, to work part of the square in one shade and part in another.

ROCOCO STITCH

This is not much used by modern workers, but a short time ago it was quite common. It is to be found upon early samplers and on small reticules and purses of XVIIth-century work, where it is used to execute both pattern and ground. The

diagram (fig. 77), drawn to explain the working, gives very little idea of the effect that is obtained with it, for it is a pretty stitch and one with a good deal of character. It is shown to best advantage when an entire piece of work, both background and pattern, is carried out in it. The ground looks best if it is in a light tone, in order to show more clearly the small characteristic perforations that repeat over the surface. Conventional floral patterns of the description so common in canvas embroidery are best suited to show rococo to advantage. It is most easily worked in diagonal lines, which point should be remembered in designing or in choosing a pattern. It is used for some of the details in the work represented in the frontispiece, where it can be recognised (like the eye stitch) by the surface over which it is worked being powdered with small perforations. The two do not resemble each other in any other particular. Fig. 77 explains by means of two diagrams the method of working rococo. In that on the left hand the two stages of working it are shown. They show that rococo is practically an adaptation of Roumanian (see fig. 20, Part II) to a canvas ground. The tying down, central portion, of the stitch passes over and hides the vertical canvas threads at each edge of the cluster, for which reason a canvas with slender vertical and stouter horizontal threads best suits it. The diagram to the right hand of the figure explains how to pass from one cluster to the next.

G. C.

A CHAIR-BACK.

(For particulars see the last page of this part.)

PLATE XVI. AN EMBROIDERED CHAIR-BACK WITH LINES OF DRAWN THREADS

PLATE XVI illustrates a simply embroidered design for a chair-back, which is carried out in "Mallard" Floss on a fairly coarse biscuit shade of linen. Both the drawn work and the embroidery are of a strong and durable nature, as elaborate work would be rather out of place on an article which may have to stand the ordeal of the wash-tub.

The bold drawing and the main idea of the quaint little rose-plants are borrowed from Persian embroidered and woven stuffs of the XVIIIth century. Designs from this source are remarkable for direct simplicity, and seem to owe their charm and beauty to a characteristic severity and economy of arrangement. These Persian designs, and many of those on the pottery and tiles to be seen in the Indian section of the Victoria and Albert Museum, are some of the best from which to create or adapt patterns for simple and beautiful embroidery. Their effect has an appeal quite its own, and they will be found most suitable for needlework, especially in these days when many embroideresses dislike spending too much time over elaboration.

The lines of drawn thread should be worked first. To carry them out, a cotton or linen thread of the same shade as the linen is employed, and the sides of the chair-back are hemstitched after drawing out seven threads of the material. The same stitch is used on the other drawn lines, and the clusters in each are composed of six threads. In working the second side of a line, three threads from one cluster are drawn together with three from the next, to form

the zigzag effect. It is best to use some of the drawn-out threads to make the crosses which fill the corners and the spaces where the lines meet. These crosses are made by passing diagonally across the little space twice over, securing the working thread in the middle and darning over and under two or three times.

To make the fringe, a few threads are drawn out across the material one and a half inches from the bottom, and the upper edge hemstitched to make it firm; after which the rest of the threads below are pulled out. Six stitches in all are used for the sprays—namely, satin, stem, buttonhole, chain, French knots (for which see Part I), and the common needlework back stitch.

For the flowers and buds satin stitch is an effective rendering, and is more easily kept even if worked in a small tambour frame. The outside petals are worked first in the palest shade of pink, then the next row in the middle shade, and the minor ones in the darkest pink. The stitches lie side by side, but converge very slightly towards the centre of the flower when approaching the narrow end of each petal. It is best, when working a petal, to begin with the longest and middle stitch, and then fill up on each side of it. This plan is often useful when working satin stitch. French knots, in a very pale and dull shade of pink, form the centres; a row of them on the edge, with one knot in the middle, being sufficient. Back stitch, in the darkest pink, makes an outline to the flowers, and the little green points are worked in satin stitch in the second darkest shade of green. This shade

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is also used for the stem-stitch outline of the buds' calices, the fillings of which are in satin stitch in the palest green. The buds are worked in dark pink on the outside with inner petals of the next shade.

The leaves are worked in buttonhole stitch in the two palest shades of green. The stems are worked in stem stitch in the darkest green and the red, care being taken to work them closely and neatly, to finish with a single line towards the flowers and buds, and to carry on a single line of dark green part way up each leaf to form the vein. The leaves at the base are worked in stem stitch in the darkest green and the medium

shade of pink, with a vein of dark red in chain stitch.

The interlacing patterns, which lightly fill up the space beneath the flowers, are worked in two shades of stone-colour in stem stitch. Single chain stitches, in groups of three or four, are placed at central points of the pattern.

The numbers of the "Mallard" Floss silk used in this piece of work are: 206b, 206c, 108, 108a, 109, 109a, 66x, 67, 68, 25, 30b. Two skeins of the palest green and medium pink will be needed, but one skein of each of the others is enough.

F. CHANNER.

A TREE OF JESSE.
An example of *opus Anglicum*.

OPUS ANGLICUM

(TRANSLATED FROM THE FRENCH OF M. LOUIS DE FARCY)

I AM telling nothing new to archæologists or to embroiderers familiar with the literature of ancient documents in saying that the works of the needle, of *opere Anglico* or *façon d'Angleterre*, held the first place in inventories during the Middle Ages. We find them everywhere, in the treasures of the Holy See, of our cathedrals, and of our rich abbeys, as well as in the inventories of the Kings of France and of noblemen renowned for their love of beautiful works of art, such as Jean Duc de Berri, Louis I. Duc d'Anjou, and many others.

When in 1854 M. Francisque Michel* brought to notice the extraordinary ability of the English embroiderers, he added, "It is very difficult to say exactly what this work was." He was right. At that time a piece of English embroidery could not be distinguished from that of another country. To-day it is no longer so. Study of the ancient specimens of embroidery spared from time's injury and shown in retrospective exhibitions and private collections, or brought to light from chests where they lay neglected, gives us a clear idea of this ancient work.

We need not rely upon the more or less laconic text of ancient inventories alone, for we have some authentic specimens of *opus Anglicum*.

Invited to speak at length to the readers of EMBROIDERY, I do so very willingly, as it gives me an opportunity to express my great admiration for the *acu pictores* of the XIIIth and XIVth centuries, who produced so many artistic marvels in England which are to-day scattered throughout Europe.

I shall try, then, to explain the technique of the *opus Anglicum*, to show the popularity which it enjoyed during the Middle Ages, and, finally, to point out the characteristics which distinguish it at first sight from embroideries of all other origin.

I. TECHNIQUE

Methods of execution naturally vary according to the material. If the material to be decorated with embroidery is a precious stuff, such as velvet, satin, or the like, the draperies of the single or grouped figures will be in gold or silver thread. If, on the contrary, ordinary linen is used (on which the whole

* "Recherches sur le commerce, la fabrication, et l'usage des étoffes de soie, d'or et d'argent pendant le moyen âge," t. ii. p. 337.

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of the subject to be embroidered will have been traced), it must be concealed under a ground of gold worked with the needle between the figures and the various motives of decoration which will be worked in coloured silks, in the style of the miniatures of the XIIth and XIIIth centuries.

In either case, the artist—inspired by the Golden Legend, the illuminated Bibles, or the contemporary miniatures—designs, in simple fashion, scenes from the Old and New Testaments or from the lives and martyrdoms of saints, arranging them in

Fig. 78

an orderly way under canopies, arches, or in medallions. Having noticed that that part of the mantle of a cope* corresponding to the width of the shoulders falls to the heels straight and without folds, whilst to the right and to the left, especially towards the base, they are very numerous, the designer had the adroitness to arrange the composition so as to leave room for the more complicated and interesting scenes in the centre of the back and near the orphreys, contenting himself often with a single figure of an apostle in the medallions or divisions

lost in the folds. Notice how well he has observed this rule in the Syon cope or in that in the museum of Vich, to mention only two. At other times, when it was necessary with pieces of exceptional richness, he gave up this carefulness and covered all the surface with storied scenes, without pre-occupying himself as to whether they would or would not be lost in the folds—as, for example, in the copes of Bologna, Pienza, or Toledo. One marvels when in the presence of these wonderful pieces, several of which have been robbed of the pearls, rubies, and stones with which they were loaded. What richness of idea and composition in the three copes that I have mentioned !

Let us now consider the methods of work for a cope entirely made of embroidery with a ground of gold. The worker first traces on linen the design to be reproduced with the needle. Then he begins to work the silk embroidery (figures, architecture, motives of decoration), which is the most artistic part. He uses split stitch (in appearance a very fine chain) worked in circles to express the cheekbones, lengthways, slanting, or across, to allow him to follow the modelling of the figure, expressing always such details as wrinkles or muscles of a face by means of a single shade of silk. Draperies of vestments are coloured quite simply in three tints, and outlined with a black or dark brown line. In much the same way he carries out foliage, stems, birds, and motives of architecture. He follows very closely his brother, the miniature painter, and, to lighten the edges of foliage, he borrows from him that

* A cope, or pluviale, a processional robe of a priest, was originally used as an outer covering protecting rich vestments in outdoor processions. Later it became a more ornamental robe, and in the Middle Ages was frequently covered with fine embroidery. It is semicircular in shape, and worn simply hung upon the shoulders, falling to the feet all round. It is fastened together at the chest by an ornamental fastening called a morse. Fig. 78 is a diagram of a XIVth-century English cope, showing the main lines of its ornamentation. The broad band running along the top is the orphrey. In the present example this is decorated with saints standing in niches. When the cope is worn, the two ends of the orphrey come together and form a double band down the front. These and the hood were always richly ornamented, whether the rest of the cope was or not. The hood, not represented in the diagram, was placed just below the orphrey in the centre of the back. Though originally meant for practical use, in the XIIIth century this hood was purely ornamental, small, and of triangular shape. In the three big divisions, seen in the middle of the figure, occur the three important subjects: the Annunciation, the Adoration of the Magi, and the Coronation of the Virgin. The less important divisions on either side are filled with apostles, saints, and martyrs. (*Translator's Note.*)

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white line which one so often sees in the illuminated Bibles and missals.

The silk work finished, one of his companions, less clever than he, will have to undertake the gold ground. I have said less clever—in fact, patience and care are all that he needs to carry out the work successfully. He is not asked to blend colours harmoniously; it is sufficient that he covers all the spaces and hides the linen ground under a web of gold thread. This ground must be sufficiently supple and solid to correspond to the thickness of the silk portions already worked, so that the two materials together form, without any irregularity of surface (such as would result from using side by side materials of different thicknesses), supple and graceful folds, as if it were a mantle of velvet or satin. With this aim in view he uses very fine gold thread, and instead of couching it upon the linen he incorporates it with the ground material, fixing it there from point to point by means of *point retiré*.

This *point retiré*, unfortunately abandoned at the beginning of the XVth century, gave place to couching and to *or nué*;^{*} it was, however, very much more durable than either of the latter. We cannot but deplore its disappearance, and hope for its re-establishment. Upon examining the back of one of these gold grounds (*auro intextus*) worked with the needle, one sees a number of small stitches of gold thread which exactly correspond to the points where the worker has passed the gold thread through the linen. Each of these little gold stitches encircles a linen thread at right angles to itself. This linen thread represents a kind of peg or bolt placed there to prevent the thread of gold from returning to the front of the material. (See fig. 82, which shows the front and back of a piece or

drapery worked in *point retiré*.) How could a stitch such as this be executed? I imagine that it necessitates a vertical frame placed between two embroiderers working one on the front, the other on the back of the linen. The first, following the pattern,

Fig. 79

passes the needle threaded with gold through the stuff; the second returns it by the same hole, after having passed another needle threaded with a strong linen thread fastened at the back, and fulfilling the office of a bolt so well that upon the face of the embroidery there is hardly any interruption in the surface

^{*} This is a method of laying gold threads horizontally across the surface very close together and covering them with various coloured silk threads and thus working out a design. (*Translator.*)

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of gold. (See in "La Broderie," figs. E^{bis} and F^{bis} of the first plate. See also fig. 82 on the opposite page.) This *point retiré* was not always worked in gold or silver thread. The ground of the Syon cope

Fig. 80

is all of coloured silk worked in this way.

Let us see, however, how the worker makes use of this curious procedure. Suppose he has to work out a geometrical pattern such as a chevron, zigzag, or lozenge. He counts scrupulously, as in cross stitch embroidery, the threads of the ground

material, and repeats his pattern indefinitely, without any thought of the direction of the figures and ornaments amongst which he works. Thus we see the zigzags of the Syon cope and the elongated lozenges of the cope of St. John Lateran presented vertically near the figures on the middle of the mantle, then more and more obliquely, and, finally, horizontally, near to the orphreys. This inevitable result, arising from having worked by the counted threads of the warp and woof of the linen ground, is evidently very awkward, especially when the work is examined closely. The difficulty is avoided by varying the patterns of the grounds of gold, which are sub-divided into medallions or compartments. They may be filled with fleur-de-lis, foliage, lions, etc., as on the copes of Madrid and Pienza. Inevitable upon a semi-circular field, such as the mantle of a cope, the inconvenience ceases to exist on an orphrey or on the square ground of an altar-cloth. The artist is evidently most at his ease when working the *point retiré* upon linen by counted stitches, no matter whether he is carrying out purely geometrical regular patterns, diaperings or powderings of fleur-de-lis, dragons, or eagles. In this last case the metal threads expressing the motives of ornament or heraldic figures are laid vertically, whereas those of the filling or background are laid horizontally. This results in a beautiful play of light, producing the effect of a very rich damask.

These two stitches—the one for the silk, the other for the gold—generally sufficed for the worker. He knew, however, of others at this brilliant epoch, the XIIIth and XIVth centuries, the apogee of *opus Anglicum*. Witness the splendid embroidery of the Tree of Jesse acquired recently by the Musée des Tissus at Lyons at the sale of the Spitzer collection. (See the Frontispiece and figs. 79, 80 and 81, which are details drawn from the original embroidery.) It shows us three other stitches in execution. The dark green leaves of the vine, shaded

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with veins of bright yellow, have been embroidered in tent stitch separately on very fine canvas, which has been so cleverly applied that one does not perceive the difference in the working except at the back. The grapes, the crowns, and the pearls ornamenting the cushions are executed in padded satin stitch. Finally, the cushion upon which Solomon is seated is worked

Fig. 81

in laid stitches of coloured silk, held in place by a trellis of gold thread couched over it. It must not be thought that this technique belongs only to England. It was practised in

France and Italy, especially at Florence, where the painters with the needle surpassed all the other embroiderers, both from the point of view of draughtsmanship, of grace and unity of figure, as well as in richness of composition and in the exquisite variety in the grounds of gold. The orphreys and the altar-frontals of *opere Florentino* that I have reproduced in "La Broderie du onzième siècle jusqu'à nos jours" and its supplement allow me to make this appreciation.

All the preceding remarks apply to the XIIIth and XIVth centuries. The pro-

cedure described above is soon abandoned, the technique is radically modified. Split stitch disappears and is replaced by *plumetis*

Fig. 82

(feather), satin stitch, and laid work for silk. Ordinary couching replaces the *point retiré* for the gold thread. I do not think that the *or nué* has been much in use in England, whereas in France, Belgium, Holland, Italy, and Spain it has produced masterpieces of which I have given brilliant specimens in "La Broderie." I must pause in order not to abuse the kindness of the readers, and bring this chapter, already too long, to a close.

L. DE FARCY.

I (To be continued)

PLATE XVII. AN EMBROIDERED HANDKERCHIEF-CASE

THE embroidered square illustrated in Plate XVII is designed for both a handkerchief-case and glove-case. For the former, the bands of embroidery, made up of detached flower-sprigs, are repeated three times over the surface, as shown in the coloured plate; for the latter, there can be either one or two bands of the sprigs running along its length. Two would look best, but one takes less time to work. The actual size of the handkerchief-case is nine inches square, the glove-case would be longer and narrower. The embroidery is worked in brightly coloured "Filo-floss" silks upon a silver-grey linen. To use a coloured background sometimes makes a pleasant change and admits of a different colour scheme to what would be possible with a white ground. The reader can see from the example illustrated that good use can be made of white in the pattern when the ground is of some other colour. All the flowers in this design have some white upon the petals, whilst the alternate ones are mainly composed of it.

The design has two elements only in its composition: a narrow band, which is made to interlace and form an all-over trellis pattern; and a flower-sprig, which repeats frequently and is arranged so that it builds up three ornamental bands to decorate the object. To vary pleasantly the stiffness of the arrangement, the flowers, though alike in shape, differ in colour. The vari-coloured flowers repeat in the same order in each band, but on the two side bands they move a step behind those on the centre band. In the colour and its arrangement lies the chief interest of this piece of work. The flowers have been suggested by the star cineraria, but they have been very freely adapted to the requirements of the case. The only re-

semblance to this flower lies in the centres, the colour, and the arrangement of the petals.

The stitches used are stem, chain (for the description of which see Part I), Roumanian (see Part II), fern and couching (both of which are described in the present number).

To carry out one of the flowers, say a white one with red-tipped petals, begin as follows. Thread the needle with white and commence at the base of a petal. It is executed in vandyked Roumanian stitch. Upon reaching the point where a line of red should come, leave sufficient space for three stitches in that colour, and then work two more in the white. Leaving the tip unworked for the moment, execute the rest of the petals in the same way as the first. When all the white is worked, the red line can be filled in and the red tip. Three stitches in each of the two spaces left unworked will complete each petal. The centre should be worked next in chain stitch, using double thread. It is commenced in the centre and worked round and round spirally until it is the right size. The arrangement of the colouring here is important. The white flowers with coloured tips have centres which commence with a blue and a purple thread (placed together in the needle); for the outermost circle the colour changes to purple and orange. The red flowers with white tips have the same centres as the above. The yellow flowers have centres which commence with blue and purple and finish off round the edge with doubled blue thread alone. The blue flowers have centres worked entirely in orange and purple. The calices are worked in the darker green in double thread, and are formed of two line-stitches which meet at the point in the centre.

PLATE XVII.

A HANDKERCHIEF CASE.

(For particulars see the last page of this part.)

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The trellis is worked last because, if done as in the illustration, it is most easily executed in a frame (either a circular hand frame or an ordinary one). It is carried out by means of long lines of thread laid across and couched down. This is quite simple to do, but if the worker wishes, the lines may be worked equally satisfactorily in stem stitch in single thread "Filo-floss." For the couching, black "Coarse Purse Twist" is threaded in and out in long stitches, so as to form the interlacement. It is next couched down (see fig. 101) with black "Filo-floss," the stitches being placed about an eighth of an inch apart. The couching stitches should, if possible, come and return by the same hole through from the back, as that makes them as little evident as possible. To complete the work, a narrow black and white silk cord is sewn round the edge.

This is a type of design that is applicable to many objects. Exactly as reproduced in the coloured plate, it would make a lady's

handbag. At the points or the trellis at the top, rings could be attached to carry the cord handle, and a neat finish for the base would be a row of coloured tassels placed also at the points of the trellis. Single bands of the flowers, without the surrounding trellis, would be pretty for dress decoration. For a blotter cover and many other square or oblong objects, a design of this kind is useful.

Washing Filoselle or Stout Floss can replace the "Filo-floss," if the worker wishes it. The "Filo-floss" silks used in working out the embroidery, as reproduced, are as follows:—

Blue Flowers	.	.	No. 222.
Red	"	.	No. 163j.
Yellow	"	.	No. 129.
Stems.	.	.	No. 149g.
Leaves	.	.	No. 20a.
Calices	.	.	No. 20b.
Centres	.	.	Nos. 149g, 92a, 222.
Trellis	.	.	Coarse Purse Twist, size No. 1, tied down with black "Filo-floss," No. 178.
White	.	.	No. 177.

G. C.

STITCHES—V

FERN STITCH—FISHBONE STITCH—TAILOR'S BUTTONHOLE

AMONGST the many existing varieties of embroidery stitches some of the prettiest and most attractive are those which bring to mind, more or less directly, natural forms and growth. To give an example of what is meant by this, close lines of stem stitch seem to recall a growing stem much more than would, say, satin stitch worked across it. Though the latter suggests a kind of realistic roundness, the other gives a truer idea of the object to be represented, and so is a much more pleasing rendering of it. The first two stitches to be described may be said to belong to this interesting group. The third is for many purposes a

distinct improvement on the ordinary stitch which goes by the name.

FERN STITCH

This stitch is so simple that it hardly deserves a name to itself, and, needless to say, it is most easy to work. It is composed of three single line stitches which spring from the same base and radiate outwards in palmette fashion. When used as a light decorative filling for a leaf (as illustrated in the accompanying diagram), it suggests the veining rather prettily. It is suitably employed also for carrying out a light border-line or any kind of feathery foliage. Examples of

EMBROIDERY

its use in these two last-mentioned ways can be found in the broad border figured in Plate XX. With so simple and straightforward a stitch there is hardly need for further explanation than is given by the diagram (fig. 83). The three single stitches composing it are worked in succession; they are usually about one-eighth of an inch in length and of equal size. Each successive clump is worked immediately below the one just

Fig. 83

completed, which results in the centre stitch of each group joining, and thus making a continuous line with those immediately above and below it. Sometimes a little irregularity in the working is unavoidable; it may become necessary, in order to make the pattern clearer, to leave out here and there a side stitch, as can be seen in the ivy-leaf diagram. When tracing on the material a pattern for working in fern stitch, it is not necessary to indicate the sides branching off, as these side stitches are most easily worked freely as they occur.

FISHBONE STITCH

Fig. 84 illustrates this variety in one of its most appropriate uses—that of solidly filling a leaf. It can be seen in actual use in Plate XVII, where it is employed for all the leaves which decorate the embroidered square there illustrated. To the uninitiated, it may resemble a double line of satin; but there are subtle differences, all of which are to the advantage of the stitch under discussion.

Fig. 84

Satin has very often a slightly raised, almost padded, effect, whilst this lies beautifully flat, a characteristic which is in better taste in embroidered work. With fishbone the lines meeting at an angle at the centre of the leaf are neatly mitred together; with very few varieties would they fit so well into one another. An effective way of working it is to carry it out in two contrasting colours, and taking four or five successive stitches of each in turn, thus making a chequered leaf or band (see fig. 85). To work fishbone stitch for a leaf filling, as in

fig. 84, bring the needle and thread through at the apex of one of the leaves. Take a single stitch, about an eighth of an inch long, down the centre; bring the needle through

Fig. 85

again on the edge of the leaf close to the first stitch, and take it to the back just over the centre line; bring it through again on the margin of the leaf, quite close to the first stitch, but on the other side of it; take it through to the back just over the centre line. (The needle and thread in the diagram show the process at work.) This is done on the two sides alternately, until the space is covered. There is one point to be careful about, namely, to take each stitch well over the central vein line, not just upon it, for this makes the stitches cross well over each other at the middle, whereas if they only just met there the probability is that the ground material would peep through and spoil the effect.

TAILOR'S BUTTONHOLE

This stitch, which is simply a development from the ordinary variety, is for many embroidery purposes an improvement upon the original. It is used in preference to the usual form on occasions when a more important heading is required. It has one practical advantage over the ordinary stitch—which is that, owing to the heading being composed of a firm knot, it is more durable. Tailor's buttonhole is simple to work. Proceed as in the ordinary stitch until reaching the stage of finally pulling the needle through

to complete it (see fig. 6, Part I). Instead of doing so, take hold of the thread fairly near to the eye of the needle with the finger and thumb of the right hand, pass it under the point of the needle from right to left so that it takes the position seen in the diagram (fig. 86). Then pull the needle and thread through, and the stitch is completed. This stitch is used for all the flower forms in Plate XIX, where the ordinary buttonhole

Fig. 86

would have been impracticable, owing to the separation of the stitches. The firm knot at the heading of tailor's buttonhole makes it much more satisfactory for the purpose.

G. C.

DESIGNING—IV. KNOT DESIGNS

IN addition to the border work already described in Part III, there are other ways of using plain or decorated bands in embroideries. Single bands of ornament, placed either close together or wide apart, can be worked across panels as surface decoration. Two bands of different design or colouring may be used alternately. The number, width, and degree of decoration of the bands may be varied to any extent; wide bands may alternate with narrow, plain with decorated, and so forth, and they may be drawn in horizontal, vertical, or diagonal directions. We are, no doubt, more accustomed to find band designs upon woven fabrics, but the decoration of many very

Fig. 87

beautiful embroideries follows this type of arrangement. The Persian *Nacsh* embroideries, of which many specimens may

be seen in the Victoria and Albert Museum, are typical examples. They are worked in

Fig. 88

silk upon linen grounds, and show wonderfully rich schemes of colouring and beautiful, intricate designs arranged in diagonal stripes.

Another form of band design is that in which two series of parallel bands cross each other at right angles, dividing the surface to be decorated into a number of panels. In designs of this kind, of which the Scotch Tartans are well-known examples, much variety may be introduced by different methods of arrangement and enrichment. The shapes and sizes of the panels may be varied by changing the width of the spaces between the bands which produce them; some, or all, of the panels may be decorated, or the enrichment may be confined to the bands themselves. The possibilities thus opened out are very numerous, but for the present we must be content with the example given in Plate XVII, in which a design of plain crossed bands is enriched with a little flower sprig.

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In this design the crossing bands which divide the surface up into panels interweave,

work," an ingenious method of employing band-work which has been used by de-

Fig. 89

each going alternately over and under those which it encounters. In fig. 87, which is but a modification of the cross-band design, decorated with interlacing circles, we have a very simple example of so-called "knot-

corators from very early times. It is common in both Eastern and Western art, in the work of painters, weavers, metal workers, carvers, and many other craftsmen. In designs of this type one or more continuous

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bands are twisted about and woven up into intricate patterns. In the decoration of manuscripts and of their successors the early printed books, many examples of knot-work occur which deserve the study of the embroidery designer, for they have an intimate connection with this work. The original of the knotted border in fig. 94 from a Venetian embroidery pattern-book will be found in a book printed in Venice in the end of the XVth century.

That book decorations were frequent sources for embroidery designs is beyond doubt. In other countries and periods besides Italy in the XVIth century the same influence may be suspected, for the decoration of much Coptic and Roman-Egyptian tapestry work shows decided traces of the same inspiration.

Knot work has been traced to an Eastern origin, and there is clearly some connection between Northern work of this type and

Fig. 90

the designs found upon those wonderful woven tapestries which have been recovered from tombs in Upper Egypt in such perfect preservation. In fig. 88 is given an example of a simple knot design of this type which decorates a large cloth cover in the Victoria and Albert Museum. It is a strong and impressive piece of ornament, composed of a set of four loosely twisted knots arranged so as to fill a circular medallion.

Very often the bands which are twisted

up into knot designs are themselves decorated, and in many examples the spaces left unoccupied by the bands are filled with floral or other decoration. A carefully designed piece of knotting is a very effective way of subdividing a large panel into smaller spaces.

Fig. 91

On the other hand, band work is often found so tightly knotted up that the ground is entirely covered and no space left for further decoration. An example formed of decorated bands with the spaces between them filled with conventional floral sprigs is given in fig. 89.

Knot designs are interesting pieces of planning for the student to attempt; they demand care and intelligent study if they are to be well done. The regular distribution of the various parts and the correct interweaving of the bands "over and under" demand no small amount of attention. One method of designing knots is actually to work out examples with strings and pins. In *appliqué* work lengths of plain or decorated cords or braids are found sewn down in knot form upon grounds. In these cases the fact that the decoration is actually constructed is of considerable decorative value; but the embroidered examples in which the construction is simulated are not inferior in interest.

The actual construction of knots is, however, a more difficult process than that of drawing them; indeed it is usually necessary to prepare a drawing for such a piece of design before proceeding to carry it out. In preparing designs it is well to

proceed slowly and systematically by easy stages from very simple beginnings to more complex developments, working not a single example at a time but a whole series, in which each step is a logical result of what has been done previously. The six examples in fig. 90 illustrate a methodical way of working out a knot design which may be of use to the beginner. In the first of the series, the top left-hand example, we have a *continuous, endless* band. In the example to the right of this, the same figure is reproduced with a slight change of form, each of the four sides being indented. In the third figure another slight change is effected, the points of the indented sides being twisted into loops. These three figures are again drawn out, immediately below the first series, with the addition of another endless band which is interwoven with the first and developed step by step in the same way. If series of exercises such as this are properly carried out, we have in the last example a more or less complex piece of design, and in the others all the stages of its development carefully set out. It is well to make a number of sets of these and keep them for reference and use. A couple or more of the figures may be strung together into borders like that already quoted (fig. 94). The last example in the set given (fig. 90) forms the basis of the design in fig. 89. Such pieces of ornament are required constantly in embroidery designs, and it is well to have a stock in hand or to acquire the habit of designing them with facility.

We have given instances of knots formed of plain and decorated bands, but before closing the series another kind must be mentioned. In this kind the band which is twisted into the design is treated as the stem from which leaves, buds, and flowers issue, filling the interstices of the knot. Some of the wood-cut initial letters of early Italian printed books gave very formal renderings of this type, in which symmetrical knots are decorated with a regular alternation of a conventional bud or scroll-like leaf. More frequently, however, the knot-

Fig. 92

ting is less formal or its symmetry is disguised, as in the two examples given in fig. 91, also from early printed books. These are but developments of the type of design given in fig. 92, in which letters are decorated with plain knots. This use of the knot suggests another use for the various figures evolved in the series in fig. 90. The designer who has prepared a set of exercises like those suggested may find some further interest in weaving these designs around the letters of the alphabet that appear most suitable for the particular figure, thereby obtaining some excellent initials for marking purposes, and so forth. The Roman alphabet in the article on Lettering in Part IV gives excellent letters for the purpose.

A. H. C.

PLATE XVIII. A PULPIT HANGING

THE pulpit or lectern hanging illustrated in Plate XVIII is enriched with a decorated monogram. The ornament surrounding the letters is arranged to fit into a circular shape. The embroidered portion in the original measures twelve inches in diameter. The green background can be extended on every side as far as necessary, and at the base it can be finished off in the usual way with a fringe, which might be made of two shades of green recurring in regular alternation along its length. The green of the ground and the green in which the stems are worked would be appropriate shades to use for this, as the two colours would harmonise with the embroidery, and yet be sufficiently distinct in tone to contrast well with each other.

The embroidery is carried out in "Stout Floss" upon a ground of green silk throwan. This has been chosen for the ground because of the difficulty of obtaining a good green in ordinary "church" embroidery materials. Green damask can be used instead of the former. The colours chosen for the embroidery are mainly delicate shades of blue, pink, and green. The four largest flowers are worked in three shades of greyish blue, white, and purple. The star-shaped flowers are composed of three shades of pink and white. The small ones, dotted about the lettering, are of pure white, whilst those marking the circular margin of the embroidery are of white and pale blue. The lettering is filled in with soft green, trellised over with white, and outlined with a paler shade of green. This paler green is continued for the stems, all of which spring from the extremities of the letters. A little gold thread is used for the centres of the white flowers and silver thread for the centres of those worked in pink.

The methods employed for carrying out this piece are mainly laid work and couching, both of which are discussed in a separate article in the present number. Satin stitch is substituted for laid threads whenever the space to be filled in is very small, such as the petals of the smallest flowers; this is because laid threads do not lie well unless they are of a certain length. The arrangement of the colours can be seen in the illustration, which also gives a fair idea of the direction in which the threads are laid. These are not always parallel; often they radiate slightly. The turned-over petals always have the stitches laid in a contrary direction to those upon the surrounding parts. The stitches, where possible, are taken from edge to edge of the forms, because they lie better when so worked, but when the lines radiate it is necessary to fit in some shorter stitches. The floss silk is split in half for all the laid work. The long flat stitches are tied down in the usual way—that is, by laying a transverse thread across, and couching it down at intervals to the background. The colour used for the tying down is one that shows least upon the special threads it has to bind. The floss is split to one-fourth for this, and couched down with the same sized thread. For the latter "Filo-floss" might be substituted, which would save the trouble of splitting so much silk. The tying down of the laid threads should be done before the outlining.

The blue flowers are outlined with the palest shade of blue. For all the outlining the floss is used, just as it unwinds off the reel, without any splitting. It is couched down with a fine thread of the same colour, either split floss or "Filo-floss." The silk which is couched down for both outlines and stems is allowed to lie a little loosely upon the

PLATE XVIII.

A PULPIT OR LECTERN HANGING.
(For particulars see the last page of this part.)

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surface, and the couching thread is pulled rather tight; this makes the silk bunch up a little between each tying-down stitch, and so decorates the edge prettily. All the flowers are outlined in the same way as those in blue, the only difference lying in the colour. The pink flowers are edged with

Fig. 93

the palest shade of pink, and all the small flowers with white. The centres of the flowers should be worked last because they are composed of gold and silver thread. The small white flowers have golden centres made of what

are commonly known in drawn-thread work as wheels. Fig. 93 illustrates how they are made. The pink flower centres are too large for this treatment, and so are filled in with silver thread couched down with white. They are commenced at the middle and worked round spirally until they are large enough. These centres are outlined with one row of the deepest pink in split stitch.

The stems, carried out in similar fashion to the outlines, are made up of two lines of green silk. There is no filling between the lines of stem, excepting where occasionally they widen out at the end into a kind of tendril. For those parts the darker green is worked across in satin stitch.

The green silk, filling up the letters, is laid in perpendicular lines, no matter in what direction the lines of the letters run. If the silk were laid at different angles over the letters, it would vary in colour, whereas they require to shine out in one flat tone. The white trellis is placed across before the outline is worked round. It is composed of white floss split in half, and at the crossing of the lines is tied down with fine white silk.

This design could be carried out in other colour schemes and on different grounds. One quite different method of work that would suit the design admirably would be darning; both pattern and ground as far as the edge of the circle should be filled in with darning. This could be done on suitable material, and the completed work could afterwards be mounted on green. The darning should follow out the shapes of the forms to be filled, and the background be carried out upon the same principle.

The following "Stout Floss" silks have been used in working out the design:

Greens	.	.	.	.	Nos. 48a, 48, 47
Pinks	.	.	.	.	Nos. 51d, 51b, 51a
Blue	.	.	.	.	Nos. 12a, 11, 10
White	.	.	.	.	No. 118
Purple	.	.	.	.	No. 120a
Silver					
Gold					

G. C.

A VENETIAN PATTERN-BOOK

A SMALL book of designs for needle-work, lately acquired for the Victoria and Albert Museum, is of such beauty and importance as to call for detailed description, more especially as it appears to belong to a somewhat rare class of work. For one thing, we have here to deal with a series of original drawings, very neatly arranged in book-form, carefully

spaced out on each page, bound in the faded remains of old rose-coloured silk, and complete, with dedicatory title-page and colophon. The volume measures $8\frac{1}{2} \times 6\frac{1}{4}$ inches, and includes seventeen leaves, each of which has a design or group of designs on the front. The first page contains the following inscription, neatly written in brown ink, within a freely drawn calligraphic

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border: "Vaghi lauori dille doñe disegnati da mi Amadio Nouello e presentati alla Vertuosa et Nobile Dona BARBARA MOLIN degna et Ingegnosa persona nei quali presenti cinquanta cinque disegni ne riceverà grān fruto col suo pronto Ingegno et potrà

ornament, on the last leaf of the volume under notice.

As stated in the dedication, there are, for the pleasure and profit of this virtuous and noble lady, fifty-five separate designs. They are rather well arranged in order of impor-

Fig. 94

pore in opera secondo el suo bisogno suplicandola di gradire questo dono che presento humilissimo Venetia ottobre 1559." This is headed with an initial of the ordinary book character, with two dolphins on a yellow ground. There is nothing to add to the information conveyed in this dedication, beyond the bare statement that Amadio Nouello cannot be traced, and that the lady bears the name of one of the well-known patrician families from which, about a century later, a doge was elected. Her armorial bearings are correctly given, within an elaborate framework of arabesque

tance; beginning with sets of simple borders, placed horizontally, and numbering respectively eight, six, and six, on leaves 1, 2, and 3. Thenceforward we have more elaborate borders, end-pieces, the turning of a corner, some separate ornaments, and finally a complete floral group, followed by the device above named. All these designs are drawn in brown ink, with a good deal of freedom and spirit, and are more or less tinted with flat washes of yellow, green, and crimson, in various combinations. This colouring is executed simply, but with admirable taste; and the effect generally produced is of great

decorative value and beauty, the spacing and colour-scheme of the pages helping largely in this direction.

A consideration of the patterns opens up some interesting questions. They consist of interlacements, of arabesques, or of floral scrolls (figs. 94 and 95), some few with birds or beasts. Among the latter may be mentioned a pair of heraldic lions, standing like supporters, on either side of a floral growth; a couple of grotesque birds, strongly suggesting Chinese work; a pelican, within a wreath of flowers; and some finely drawn pigeons. In one of the simpler borders the dolphin is used with great skill; and, indeed, from beginning to end, the planning of the designs, and the way in which the elements are harmoniously distributed so as to blend into an effective whole, is nothing but extraordinary. With a very marked suggestion of Oriental influence in the style of many of the more elaborate patterns, this characteristic also of Eastern designs—the facility for covering their spaces adequately and pleasantly—may also be brought to account.

Venice, during the XVth and XVIth centuries, was a sort of clearing-house for the world's patterns. And so one need not be surprised at finding some curious echoes and coincidences in this little book. The interlacing knots naturally challenge attention. The construction of these has always been a favourite occupation with designers, and the number of the combinations made must be almost infinite. But in this case, a definite source of origin can be indicated. Several of them are copies from typographical ornaments used by Aldus Manutius of Venice in his beautiful books printed in and after the year 1495; the models having been closely, but not exactly, followed, while here and there the original theme has been expanded and multiplied. Other patterns are to be traced to the same source; and two more are free renderings from parts of an ornamental border used by the printer Erhard Ratdolt in his "Euclid" of 1482.

The latter are in a style of ornament made fashionable in the second half of the XVth century by the many Greek calligraphists who came to Italy during that period; and which is to be found frequently in illuminated manuscripts, as well as in printed books. A

Fig. 95

suggestive stepping-stone from this epoch to that of the book under consideration, is furnished by the rare and delightful pattern-books of A. Paganino, which are dated 1527.

Some of the patterns, of running floral ornament and the like, are such as are easily to be paralleled in Italian silks and damasks of the XVIth century; and, again, one must look to the contemporary tiles of Western Asia for resemblances in other cases.

It is to be feared that we cannot instal Amadio Nouello as the artist responsible for this charming production. At least one other such volume is in existence, with patterns, some of which are practically the same as those in the book under review, though others differ considerably from them. And the latter bears a different name. The simple probability is that at the time, and for a little while, there was a fashion of

giving these pattern-books to ladies; and that there was a pretty competent draughtsman who got his living by making them. He was not a very original genius, but he must have had considerable skill in what is, after all, a practice neither unknown nor discreditable to modern designers—namely, the

adaptation of pattern to a purpose for which it was not originally made. It is rather a singular fact that, so far, I have not found that he copied from, or was copied by, the makers of the published pattern-books for lace and embroidery.

EDWARD F. STRANGE.

PLATE XIX. DESIGN FOR A SMALL TABLECLOTH

PLATE XIX illustrates a simple conventional design for a tablecloth. For purposes of reproduction, the design is shown with the border stitch and corner sprays placed close to the centre decoration, but it is intended for a cloth one yard square, with the border line worked at the edge of a two and a half inch hem, and the sprays placed in the corners. The reproduction is reduced in size. The diameter of the centre decoration measures eight and a half inches.

It is worked on Turkey twill in white "Mallard" Floss silk, with the exception of the calices and centres of the flowers, which are worked in a vivid green "Floss" silk, the colouring, like the design, being rather in the style of Indian work. The design is geometrical, and based on a radiating principle, flowers growing in circles from a central point and small straight leaves forming a pattern between them. All these are connected by a conventional line-form.

The stitches used are stem, Roumanian, tailor's buttonhole, satin, and a simple back stitch. The stems of the flowers are worked with a single row of stem stitch (see fig. 5, Part I), as are also the little tendrils at the edge of the circle. The flowers are worked in tailor's buttonhole stitch, which is described in this number. It is worked here in such a way that the ends of the stitches are alternately short and long, forming a serrated edge to the flowers, although the stitches are actually all the

same length. It will be found that this makes the buttonhole knot take a slightly different form, as the thread is drawn up or down to the next stitch. Care should be taken in this and in the Roumanian stitch (see Part II, fig. 19), used for the leaves, always to leave a line of the red ground showing between each stitch, as that makes an effective and characteristic point of the style of work. The calices are worked in satin stitch (Part I, fig. 1), with a single stitch of white to outline them, and the centres in satin stitch with merely an outline of the red ground. The profile flowers are similarly worked, but in two rows of buttonhole, one quite small with close stitches, and the outer row as in the other flowers.

One difficulty which might be mentioned here is that of beginning this stitch; it requires care at first to manage the knot which begins the row of buttonhole.

The leaves are simple, Roumanian stitch being used as described on page 38 of Part II—that is, forming the chain or split stitch down the centre vein. This is continued to make the tiny stems. The leaves of the innermost circle are very similar, but are worked in a shape tapering to the stem. The enclosing line is an ordinary back stitch (see fig. 96). The stitch is simple, but it must

Fig. 96

A SMALL TABLECLOTH.

(For particulars see the last page of this part.)

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be carefully worked, as any irregularity or fault in line is very noticeable.

The corner sprays display just the same forms and stitches. The border is a series of little leaves, five stitches long, and leaving a space of about two stitches between each. At the corners it will be found necessary to add a little reversed stitch to finish the meeting of the stems.

The colouring of the design could very well be varied, any good contrast being used for the little jewel-like spots of colour. Black would be very effective with the red and white, or, on the other hand, the whole could be worked with a good blue on the

turkey-red and the points picked out with white.

The design itself could be used for many things, such as a cushion square or a blotter cover. For the former, the quarters of the circle might be used again in the corners to make a more handsome design than the little sprays.

The following are the quantities of silk required to work out the design:—

“Mallard” Floss:

Cream White . No. 70 . about 16 skeins.

Stout Floss:

Green . . No. 125d . 1 small reel.

J. M. LAWSON.

COLOUR EMBROIDERY AND ITS TREATMENT

(*Concluded*)

AS every embroideress knows, colour in embroidery is very much influenced by texture; the colour of a skein of silk looking different to the same colour when worked. Juxtaposition with other colouring, again, alters the effect of a colour. As a general principle, especially where many colours are employed, we are more likely to secure harmony if we choose reds, for instance, inclining to orange, blues inclining to green, yellows inclining to green or brown, blacks of a greenish or olive tone. Perfectly frank and pure colours, however, may be harmonised, especially with the use of gold, though they are more difficult to deal with—unless one can command the natural, primitive instinct of the Hungarian, the Greek, or the Persian peasant.

For bold decorative work few kinds of embroidery designs are more delightful than the bordered cloths and covers from Bokhara. Here, again, the colours are chiefly red and green in different shades, the reds concentrated in the form of big flowers in the intervals of an open arabesque of thin stems,

and curved and pointed leaves in green, the whole design upon white linen (fig. 97).

Such joyful, frank, and bold colour, however, would be usually considered too bright for the ordinary English interior, and under our grey skies; and colour, after all, is so much a question of climate, and though for its full splendour we turn to the south and east, we need not want for models of beautiful, if quieter, harmonies in the natural tints of our native country, at different seasons of the year. There are abundant suggestions to be had from field and hedgerow at all times—arrangements in russet, or gold, or green. What can be more beautiful as a colour motive than the frail pink or white of the blossoms of the briar rose, starring the green arabesque of thorny stem and leaf; or its scarlet hip and bronze green leaf in the autumn; or the crisp white pattern of the field-daisy on the pale green of the hayfield, relieved by the yellow centre, and by the red of sorrel; or the brave scarlet of the poppy between the thin gold threads of the ripe corn?

BOKHARA EMBROIDERY. silk on linen. chiefly in chain stitch.

The large flowers are worked in two shades of rich red inclining to crimson, with yellow centres, relieved by dark blue. The blue & yellow & red are repeated in the smaller flowers. The leaves are blueish green with a red line down centre. They are outlined with bronze brown which is also used for the stems & spirals. Inner border, between red lines. The star-flowers are alternately blue & red with yellow centres & with bronze leaves. The outer border, also between red lines. The flowers are red with blue & yellow centres alternately, & green & bronze leaves.

Fig. 97

Then, too, there are beautiful schemes of colour to be found in the plumage of

our birds. Take the colours of a jay, for instance—a mass of fawn-coloured grey with

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a pinkish tinge, relieved with touches of intense black and white and small bars of turquoise blue and white. A charming

and the garden must always be an unfailing source of fresh suggestion for floral design both in colour and form. But, of course,

DESIGN FOR AN EMBROIDERED HANGING

showing the use of shields of arms as contrasting elements in colour & pattern.

COLOURS:

oak leaves - sage green.
stems & acorns - golden brown
on pale green or unbleached
linen ground.
Herbicide colours as noted
on sketch.

Fig. 98

scheme for an embroidered pattern might be made of such an arrangement if the colours were used in similar proportions to those of Nature—say in a costume.

The mainspring of colour suggestion, as of design in embroidery, however, must be found in Nature's own embroidery. Flowers

everything in the process of adaptation to artistic purposes is under the necessity of translation or transformation, and any form or tint in Nature must be restated in the terms proper to the art or craft under its own conditions and limitations, as being essential to the character and beauty of the

result, suggestion, rather than imitation of Nature, being the principle to follow. But while we must go to Nature for fresh inspiration in colour invention or combination, we have a guide in the traditions and examples of the craft and the choice of stitches to influence our treatment.

The colour principles, too, which are to be found in some of the allied arts, may help us. Heraldry, for instance—while shields-of-arms, crests, and mottoes are in themselves excellent material for embroidery, as units of embroidered pattern, the principles of the disposition and counterchange of colour in heraldry and the methods of its display and treatment in form as exemplified in the heraldic design of the best periods (say, from the XIIth to the XVth century)—will be found full of useful lessons. A repeating pattern of leaves or flowers in a hanging may be pleasantly enriched and varied by the introduction of heraldic badges or shields at intervals; the emphatic concentrated colour and accent of the heraldry would contrast with the less formal, open, but evenly dispersed design with its recurring units and counterbalancing curves which might form the main field of the hanging (fig. 98). Interesting heraldic devices for such purposes may be found in every locality, either of family, civic, or general historic interest,

our village churches being generally valuable treasures from this point of view.

Where it is desired to restrict colour in embroidery to two or three tints, and restricted colour is generally suitable to simple decorative purposes with corresponding simplicity of design, it is safe to follow the principle of complementary colours in Nature—red and green, blue and orange, brown and yellow, and so on; but of course this would leave an immense range of choice of actual tint of any one colour open. Your red, for instance, might be salmon-pink or deep crimson; your green might range from that of the first shoots of the lime-tree in spring to the metallic bronze of the holly leaf; your blue might be that of larkspur, or the turquoise of the palest forget-me-not; while your orange might be that of the ripe fruit or the tint of faded beech leaf. Tasteful work, however, may be done in two or three shades of the same colour.

The choice of tint for the embroidery must depend largely upon the tint and material of the ground, and also upon the material in which the work itself is to be carried out—silk, cotton thread, or crewels. Whether, however, for designs which entirely cover the ground or for the lightest open floral pattern, linen seems the material on which the best results are produced.

WALTER CRANE.

PLATE XX. A BORDER DESIGN

IN the border illustrated in Plate XX the design is founded upon a flowing scroll pattern running in one direction, and imposed upon another running in the contrary direction. Imposition of one pattern upon another is used in many kinds of ornament, and often gives a satisfactory result. Usually, as in this case, one of the patterns is of more importance, and the second one practically takes the position of a decorated background, its purpose being to show off

the other to greater advantage. On each side of the central pattern runs an ornamental narrow bordering to finish off and complete the band.

When working a long length of this border, the single large red flower should be repeated in every alternate space, and the intervening portions be filled in with the group of either yellow or blue flowers, turn and turn about. A good plan would be to vary the flowers more, keeping, how-

A BROAD BORDER.

(For particulars see the last page of this part.)

ever, to the same colours and to the arrangement of one big flower alternating with a group of smaller ones.

In the original the border measures nine inches in width, and is worked upon a coarse white linen ground in "Mallard" and "Filo-floss" silks. The greater portion of it is in the coarser silk, the finer kind being used only for the grey-green feathery spray and its berries. All the stitches are fairly large, and so cover the ground quickly. The varieties used are stem, chain, buttonhole, French knots, Roumanian (for the explanation of these see Parts I and II), and fern and fishbone stitch, which are illustrated and described in the current article upon the subject. This border would be suitable for the decoration of a valance, for edging a curtain, a bedspread, or a tablecloth.

The practical description of the working will commence with the more important of the two central scrolls. The broad undulating stem is executed in vandyked Roumanian stitch (see fig. 19, Part II), in a chequering of black and stone colour; about five successive stitches of each colour being taken in turn. The groups of green leaves which the flowers spring from are worked in fishbone stitch (see fig. 84) in two shades of soft green, some of the leaves in the lighter and some in the darker tone. The three yellow flowers are worked in Roumanian stitch, the variety in colour being given by an arrangement of chequering (instead of the usual shading), in somewhat similar way to the broad stem described above. A glance at the illustration will show the arrangement of the two shades of yellow. The flower centres are first outlined round the base of the petals with open buttonhole stitch in dark brown, and the actual centre is decorated with a bunch of green French knots. The edges of the small pale yellow petals are marked by a line of dark brown stem stitch. The reddish flower is carried out in two shades of terra-

cotta. The outer portions or both inner and outer circles of petals are executed in Roumanian stitch. This is taken in a band horizontally across the petal from side to side, and, by varying the length of the stitches, it accommodates itself to the serrated edge. Inside this a band of close buttonholing is worked in a distinctly paler shade of the same colour. Running down the sides of the petals, to outline them, is a line of dark brown stem stitch. The centre is a mass of black French knots. The three blue flowers are carried out in a chequering of pale and deep blue in Roumanian stitch, which is taken across the petal from side to side, so that the tying-down part forms a kind of central vein down the petal. The centre of the flower is composed of a mass of yellow French knots, and round the base of the petals runs a line of dark brown stem stitch.

The scroll running in the opposite direction, composed of light feathery foliage, is worked in fern stitch (see fig. 83) and is very quickly executed. It is carried out in grey-green "Filo-floss." The yellow berries are made of buttonhole wheels. Double thread is used for all the parts worked in "Filo-floss."

The borders are worked as follows. The brown undulating stem and its off-shoots in chain stitch. The parti-coloured berries in two rows of buttonhole stitching in the darker shades of red, blue, and yellow. The heading of the stitch comes on the outside of the berry, and the inner edges, marked by the line of the stitching, are so worked that they leave a voided zigzag line across the berry. The narrow dentated band adjoining the border scroll is worked in the darker leaf-green in chain stitch. Next to this a line of fern stitch is worked in grey-green "Filo-floss." The boundary lines are in stem stitch in black and terracotta.

Considering that this is a broad border covering a good deal of ground, it is not at

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all a close piece of work. If, however, the worker wishes to spend less time upon it, various portions might be curtailed without much loss. The yellow berries growing upon the fern-like scroll might be omitted; the two enclosing borders might be left out and some very simple lines of stitchery substituted for them.

The numbers of the "Mallard" and "Filo-

floss" silks used in carrying out the border are as follows:—

"Mallard"		"Filo-floss"	
Greens	Nos. 233d, 233c	Green	No. 164e
Browns	Nos. 30f, 30d	Yellow	No. 196a
Black	No. 82		
Reds	Nos. 94, 96		
Yellows	Nos. 100, 99x		
Blues	Nos. 62, 60a		

G. C.

SMOCKING—I

A REVIVAL OF AN OLD ENGLISH HANDICRAFT

IN these days, when revivals of old arts and industries are so numerous, lovers of good needlework may be glad to have their attention called to a branch of old English handicraft which perhaps more than any other has suffered from neglect and misuse, and is, in consequence, in danger of being altogether forgotten, or so misrepresented by modern adaptations as to lose all its historical and much of its decorative value.

The peculiarity of "smocking," as distinguished from other kinds of embroidery, lies in the fact that it can only be properly studied in connection with its original purpose, *i.e.* the decoration of the smock frock, which from very early days until comparatively recent times was the distinctive garb of the English agricultural labourer. The student of English needlework will, however, search in vain throughout the many books and manuals devoted to the subject of embroidery, and the few that exist on dress, ancient costume, etc., for any account of the origin of smocks or smocking. Strutt, author of "Dress and Habits of the People of England," might well have given some space to a garment so characteristic of English country life as the smock. But Strutt only reflects the thought of his time when he describes in greatest detail the gorgeous costumes of kings and queens, noble lords and fine ladies, and gives

no account of the homely dress of "the common people." It would not have interested XVIIIth-century readers.

There is, however, one incidental allusion to the smock from which we may learn a good deal. "From the Anglo-Saxon tunic," says Strutt, "originated I doubt not the garment so commonly worn at this day in all parts of England, and known by the name of round frock or carter's frock." Other writers on costume just mention the "countryman's smock," but give no description of it at different periods. There are, however, abundant illustrations and descriptions of the Anglo-Saxon tunics, and by comparing them with specimens of XVIIIth-century smocks still in existence, we can form some idea of the evolution of the Smock.

The Anglo-Saxon tunic, as we learn from illuminated MSS. and from the tapestry and ecclesiastical vestments of the period, was a short, straight, narrow garment, the opening at the neck being only just large enough to allow it to pass over the head. It was worn by rich and poor alike, and the rank and wealth of the wearer were denoted by the richness of the material and the amount of embroidery adorning it. The tunics of the poorer classes were made of coarse linen, and "curiously decorated." So it is evident that in shape and material, and to a certain extent in decoration, the Saxon

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tunic has come down to us almost untouched by Fashion's fickle hand. Unfortunately for students of needlework, there is no such early record of the peculiar kind of stitchery now known as "smocking," and found in great perfection on XVIIIth- and early XIXth-century smocks. The reason is probably this—tunics, being short and narrow, had no extra fullness at the neck and wrists to dispose of. As smocking is only used to decorate rows of gathers, it would only come into use when, as time went on, greater width would be added to the tunic, in order to ensure greater comfort and better wear. In the thick homespun linen of which the peasants' tunics were made, this extra fullness would be unsightly and uncomfortable, and so some notable needlewoman conceived the happy idea of arranging her material in many rows of gathers, and added beauty as well as strength by adorning them with rows of stitchery, henceforth called "smocking."

At what period between Anglo-Saxon days and our own times this art of "smocking" originated we do not know. A woodcut of the reign of Charles I shows a countryman in a smock which has the full skirt and wide collar of a later period, but there is no indication of the decoration in the drawing. Very elaborate specimens have been traced to the end of the XVIIIth century, and I have also come across two of apparently the same date which are called "frocks." They are very short and narrow, they have no fullness, and therefore no smocking, but are "curiously decorated" at the neck and shoulders. It is evident that these are direct descendants of the Saxon tunic.

I am inclined to think that the best period of smocking was in the XVIIth and XVIIIth centuries, and that it declined rapidly after the first decade of the XIXth century. The day of the smock is over and gone. The quaint old garment that withstood the changes and chances of over a thousand years has vanished for ever before

the relentless touch of Modern Progress. One of the charms of old needlework is that it reflects the social life of the period in which it was produced, and old English smocks bear clear traces of the days when they were made and worn. The smock survived so long because it was so admirably adapted to the practically unchanging ideas and needs of the English peasant, from Saxon times to the Industrial Revolution. It vanished so quickly because it was no longer suited to the altered conditions of its wearer. With the use of machinery in farm and field, the wearing of a smock became dangerous, and the growth of the democratic spirit is not favourable to the survival of a peasant costume.

Genuine old smocks are becoming very rare. They may still be found in remote districts, not indeed in daily wear, but stowed away in attics and cupboards of old farmhouses and cottages, sometimes with no recognition of their value, but more often treasured as relics of a bygone day and forgotten skill.

When one first begins to study old specimens, one is tempted to think that each county had its own particular style of smock. It is true that most of the smocks found in any one county will be very like each other, and unlike those in any other county; but closer study makes it appear more probable that patterns were handed down from mother to daughter. They would naturally pass from village to village, and in those days of difficult travelling would, as a matter of fact, seldom stray beyond the borders of the county.

Most of the XVIIIth- and early XIXth-century smocks are very elaborate, those of later date being much simpler. An old smock from Herefordshire is a marvel of industry and skill. It is so covered with stitchery there is positively no room for any more. It is made of white linen, and embroidered in fine white thread. It must have been made for high-days and holidays,

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for most of the work-a-day smocks are made of drab or brown linen, worked in the same or a darker shade of thread. One old smock from Nottingham is a beautiful deep blue; and I am told that white smocks were sometimes embroidered in blue or red "for best."

The collars of the Hereford smock are very large, and the lower part composed of small tucks all embroidered. Above the tucks the linen is covered with elaborate ornament, showing a curious tree-like design.

ALICE B. EVANS.

(To be continued)

COUCHING AND LAID WORK

COUCHING

COUCHING is a method of working by which threads are fixed to the material without passing to and fro through it. A thread, brought through

device. A pattern to be worked in outline is often executed entirely in couching; applied work is edged with it, and it is used constantly with laid work (see fig. 99). Couching is used for solid fillings, as

Fig. 99

from the back, encircles another one laid upon the surface and returns to the back again (see fig. 101). This is the usual method, but sometimes other ways are employed. For example, other embroidery stitches, such as buttonhole, open chain, double back, etc., are used to couch down laid threads, and when this is the case the work is done in the hand; otherwise it is usually done in the frame. It may be a braid, a cord, a bunch of silk or linen threads, or most commonly of all gold or silver thread that is fixed in place by this means. For many kinds of work couching is a most useful

certain German and Oriental embroideries testify, but this is not a common practice with English workers. The typical German method is to couch down lines of woollen thread, usually following the outline of the pattern, and taking the tying-down thread obliquely across. This makes the couched thread resemble a loosely twisted cord. In Oriental work the solid couching is done by throwing a thread across from edge to edge of the space to be filled, and then tying it down with a slanting stitch, at regular intervals, on a return journey. The next line is thrown across close to the one before

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and tied down in the same way, but the couching stitches are placed, not immediately beneath, but a little behind, those of the previous row. This method, which makes a distinct pattern over the surface, is explained by fig. 102, and numerous Eastern embroideries show it.

Many different patterns can be obtained by varying the colours of the threads and the manner of tying them down. In couching a bunch of threads a common device is to let the couched threads lie rather loose upon the surface and to pull the tying-down thread tight. This results in a decorative bead-like line, and when the work is done in Stout Floss the effect is like

surface, but the working is quite different and the appearance at the back is dissimilar. The method with laid work is to bring up the needle, for each fresh stitch, close to where it has just completed the last one. Thus there is practically no silk at the back of the work as it all lies upon the surface. It is usual to secure the laid stitches at intervals, in one way or another, in order that the work may be fairly durable. It is not, however, even at its best, one of the most lasting kinds of work, and so it should be used only upon suitable objects. Stout Floss is one of the most usual materials employed for laid work, as the long, flat, unbroken stitches show the silk to advantage. The silk should

Fig. 100

strung pearls. The outlines and the stems in Plate XVIII are treated thus. A chequered line is easily made by couching the thread down with a contrasting colour. The semblance of a cord is obtained by taking the tying-down cord across aslant instead of at right angles.

LAI D WORK

Laid work is a method of embroidering by which long stitches are laid side by side until a given space is covered over by them. The stitches of which the embroidery is composed resemble elongated satin stitches upon the

be split fairly fine a fourth of the full size being a good thickness. As much use as possible should be made of variety of colour, using either contrast, shading, or interesting combinations of colours in the same petal or flower, for colour is one of the most important and telling qualities in this work. The tying-down stitches somewhat break up the surface, and from the point of view of appearance would often be better away. The best plan is to accept them as a necessity and make them part of the decoration. Figs. 99 and 100 show an interesting example of laid work. It is a portion

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of a stole, a piece of Italian XVIIIth-century embroidery. The type of design is very suitable for the purpose; the colour of the original is very charming, and the way in which the silk is laid and tied down is most satisfactory. A short description of the colour may be of interest to those who cannot examine the original.

The tulip and the dog rose (the two largest flowers) are mainly salmon-pink striped with rose-red, the paler petals are pink and pale fawn, the darker ones rose-red and dark fawn. The first group of three small flowers are pale and dark indigo-blue, arranged in distinct stripes of contrasting

Fig. 101

colour. The group of three small flowers, towards the end, are composed of two shades of pale pink. The leaves are filled in with dark myrtle-green and two shades of pale sage-green. The stems are of gold thread or cord. The whole design is outlined with a fine gold cord, which has silk twisted round it. The tying-down threads, confining the laid stitches, are red, pink, or blue, according to the colours of the silks upon which they lie. Besides the colour of the whole being very pleasing, the arrangement of the different tones is most effective. For

example, the dark myrtle-green coming close to pale sage-green makes a decorative line down the middle of a leaf, and it is the same with the rose-red laid in stripes upon the salmon-pink. The silk is laid finely, but is not very tightly strained over the surface, which makes the bands of colour wave prettily instead of looking mechanical.

In the above example the stitches are all laid parallel to each other. That is the best way, as a rule, but they can radiate slightly if necessary. When this is the case, some shorter stitches

Fig. 102

have to be fitted in between those which run from edge to edge. One most important point with laid work is that the stitches should lie perfectly close and flat, with no twist upon them. The securing of the stitches is contrived most often by a thread thrown across in a contrary direction, and fixed at intervals by means of couching stitches, as in the illustration. Sometimes the couching stitches alone secure the laid threads, without any being thrown across; at other times split stitch is worked across to fasten them down. Gold thread is used both for tying down and outlining laid work. In spite of its many good points, laid work is a difficult kind of embroidery to make attractive, though at its best it is very charming indeed. The Italians have shown us what graceful and elegant effects can be achieved by this means in the decoration of large panels, chasubles, and altar frontals.

G. C.

WHITE LINEN COVERLET. QUILTED WITH WHITE THREAD, AND EMBROIDERED WITH COLOURED SILK.
(ENGLISH, DATED 1703)

SMOCKING—II

A REVIVAL OF AN OLD ENGLISH HANDICRAFT

A VERY effective smock comes from Essex (see fig. 104), worked by an old woman who died three or four years ago at the age of ninety, and who made this smock in the last year of her life exactly as she had always made them "for father and grandfather." The "pocket-lids" are a distinctive feature of this and all elaborate smocks, and were considered very important by this old lady, and likely, in her opinion, to be overlooked by the modern worker.

It should be noticed that in all old smocks the decoration is of more importance than the smocking, which takes up a comparatively small space on the garment, whilst the plain piece of stuff on either side of it (both back and front), the collars, shoulder-straps, and cuffs, are covered with embroidery. The modern idea of smocking is almost always limited to the stitchery on the gathers, and ignores altogether the quaint and most effective decoration which is characteristic of a real smock. Smocking is not merely a few rows of stitchery or gathers, but the whole art of making "a smock."

My object in this brief study is not to

give a detailed account of the technical process of smocking, but rather to point out the chief characteristics of the old craft, in the hope that those who try to revive it now will realise that their attempt cannot be successful without careful study of the old models. It may, however, be useful to give a few suggestions as to method and materials.

The first thing, of course, is to ensure absolute regularity in the gathers on which the stitches are to be worked. Various methods have been advocated ; but it should be remembered that the old peasant workers used no such elaborate means to produce their excellent results.

If the two first rows of gathers can be achieved, the rest will follow quite easily ; but as many workers find this too difficult, I recommend the use of a good smocking transfer.

For many reasons this should not be ironed off on to the material, but pinned very carefully on to it—on the right side—and the gathering threads taken through the paper and material exactly as if these were one. The needle should be inserted halfway between and brought out exactly on the

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dot. When the rows are completed, tear off the paper, draw up the threads to the requisite tightness, and absolute regularity will be achieved. Each gathering thread can be secured with a pin, or (if this is in the way) two adjacent rows can be knotted

Fig. 103

together. The tightness of the gathers varies with the material. Some workers prefer the gathers tightly drawn up and to work rather loosely over them; others find it easier to have them more loosely drawn up.

The stitches used in smocking are few and simple. They resolve themselves into various adaptations of stem stitch in order to make different patterns upon the gathered-up material. Fig. 103 illustrates the most usual ones. These are commonly known as (beginning at the top) line, rope, cable, and lattice; but the names vary in different localities.

The most elaborate patterns can be made by successful combinations of these four

stitches, and are much more effective than the modern variations, which bring in all sorts of "fancy stitches," and by so doing injure the character of the work.

Having mastered the stitches and learnt to combine them successfully so as to make really effective patterns, the student should proceed to study the decoration, which, as I have already pointed out, is such an important feature in a good smock. This, I do not hesitate to say, can only be learnt by careful copying of the ornament on a fine old specimen. The fault in modern smocking is that the decoration, where there is any, is often out of character. The old peasant workers did not know any embroidery stitches. They only used the very simple ones which are used with plain sewing, and the richest ornament is invariably composed of varieties of feather, buttonhole, and chain stitches.

When, by careful study, the student has thoroughly assimilated the style and charm of the old models, she may venture on adaptations of them, and will find that the time spent in copying has not been wasted. No drawing or tracing should be used. The most intricate ornament must be drawn by the needle only, or the effect will be far too mechanical.

Great care should be exercised in the choice of materials. The old linens and threads cannot now be procured. The best substitutes are, I think, good English and Irish linens.

Flax threads, embroidery cottons, and crochet cotton are all used for smocking and decoration. Where the work is to be done on silk or woollen materials, Twisted Embroidery silk looks best and washes well.

One word as to colour. The needlewoman who has formed her ideal of smocking on study of old English specimens will avoid æsthetic shades. She will prefer to work in blue on white or white on blue. She will remember the good effect of dull green or dark brown on a light drab

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Fig. 104

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ground, or of a deep blue linen worked in thread of the same beautiful shade; and she will appreciate the severer charm of a pure white linen, richly embroidered in fine white thread.

In conclusion, I would urge the student to restrict her use of smocking to garments in which the original character of a smock can to a great extent be preserved. Though the smock as a peasant costume has vanished beyond recall, it can be introduced into modern life with delightful effect. It can be copied exactly, and worn by artists as a studio overall. For this purpose it is of course admirably suited without any altera-

tion, whilst with very slight modification it can be reproduced in miniature for children's wear.

Those who wish to see a genuine revival of smocking must realise that it is in danger of becoming a lost art, and must not be led astray by modern "practical" handbooks, which tell us that "smocking has *now* reached such perfection that it can be adapted to tea-cosies and numerous other things." The fine old English art that has come down to us unspoiled through so many centuries deserves a better fate than that.

ALICE B. EVANS.

PLATE XXI. TWO AFTERNOON TEACLOTHS

TWO separate designs are illustrated in Plate XXI. They are planned for the decoration of afternoon teacloths, and could be applied to any similar subjects requiring some simple border ornament. Both are worked in "Mallard" Floss upon white linen. They are extremely simple to carry out; if either is easier than the other it is the one decorated with pink roses. They are arranged for a cloth which is one yard square. The reproduction is considerably reduced in size, for the longer side of each design pictured in the plate comprises half of one side of the teacloth. In both cases the edge has a simple drawn-thread line, and beyond this there is a narrow hem of about an inch in width. The design at the left-hand side of the plate consists of repeating sprigs of pink rose; that on the right-hand side is made up of forget-me-not sprigs, surrounded with a light tracery of interlacing knot work.

FORGET-ME-NOT BORDER

This design is carried out in delicate shades of blue, pink, stone, green, and yellow. The

stitches, all described in previous numbers, are stem, chain, single and double back, and French knots. Chain is used only in single, detached stitches in a very similar way to that illustrated in fig. 33, Part II.

Commence by working the stems, in the darker of the two greens, in stem stitch. Next, work the leaves in double back stitch, in the lighter green. The stitches should be arranged sufficiently far apart to let the ground show through, for this lightens the effect. The spray can be completed by working the flowers. Each full-blown one is made up of five separate chain stitches which start near the centre and radiate outwards, whilst in the centre is placed a yellow French knot. The flowers vary in colour. Beginning with the darker blue, they gradually change to a paler shade, then to pale pink, and finally end up with stone-coloured buds. These sprigs fairly closely resemble the natural plant both in habit of growth and in range of colour. The smaller circular sprigs are worked after the same pattern as the larger ones. Back stitch in pale straw yellow carries out the interlacing knot work. This

PLATE XXI.

TWO DESIGNS FOR AFTERNOON TEACLOTHS.

(For particulars see the last page of this Part).

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is a pleasant stitch to work and quickly done. Each individual stitch should be small and of like size with its neighbours; the effect then is like a string of tiny beads laid down in a pattern, and it is very pretty. The drawn-thread edge has five threads of the warp removed, and those remaining gathered together in bunches of three.

To work out this design the following "Mallard" Floss silks have been used:

Greens, Nos. 233d, 233c	.	About 4 skeins each.
Blues, Nos. 20b, 20c	.	" 4 " "
Pink, No. 228	.	" 2 " "
Stone, No. 206a	.	" 2 " "
Yellow, No. 118a	.	" 4 " "

ROSE BORDER

Owing to the gay and varied colour of the pink roses, this colour scheme is rather brighter than that just described. The rest of the colours are quiet greys and greens. Very few stitches are used; they are stem, satin, chain, and French knots, all of which have been explained before.

One sprig described practically settles the whole pattern, for, excepting for a little variation in colour, they are all worked alike. Both stems and bases are in stem stitch, the former in the paler and the latter in the darker of the two greys. The bases have a second line underneath of stem stitch in a deep rose colour. Satin stitch, taken in the direction from inside to outside, works all the petals; they vary, however, in colour. Three petals are usually of a paler and two of a darker shade, and some of the flowers

are distinctly lighter in tone than others. These variations may be arranged in any way the worker wills, perhaps those on the inner side pale, and on the outer dark, or as in the illustration. The calices of the darker flowers are worked in pale green, and those of the lighter flowers in dark green; a single chain stitch completes each of these leaflets. All the centres of the flowers are alike. A row of dark grey French knots encircles a cluster of deep yellow ones; each knot is made with a single twist upon the needle.

The leaves had better be worked before their stems, for they are composed of a double band of slanting satin stitch that meets down the centre of the leaf. The colouring is darker green for the leaves near the apex of the sprig, and paler green for those towards the base. The stem-stitched leaf-stalks run a little way up the centre of the leaves and cover the junction of the satin stitches.

If the worker likes, an outline might be added to the flowers, or they might be worked in other stitches. The whole design might be worked in a finer kind of silk, such as "Filo-floss." This would allow of shading and other fine detail.

The following "Mallard" Floss silks have been used to carry out this design:

Pinks, 67, 66x, 65, 220a	.	.	4 skeins each.
Greens, 233c, 233d	.	.	6 " "
Green, 233b	.	.	2 " "
Greys, 206b, 206d	.	.	2 " "
Gold, 121	.	.	1 " "

G. C.

BACKGROUNDS AND THEIR TREATMENT

“**I**N needleworks and embroideries it is more pleasing to have a lively work upon a sad and solemn ground than to have a dark and melancholy work upon a lightsome ground.” This is Bacon the philosopher’s opinion upon the subject of an embroidery ground, and most people will agree with him. There are, however, many possible treatments besides this question of tone; in fact, grounds deserve a good deal of attention.

Concerning backgrounds, points such as texture, colour, and tone are amongst the

Fig. 105

first to be considered, and these have to be looked at from both the artistic and practical sides. When these preliminaries are settled, the next thought is for possible decorations, for the ground can be worked as well as the main pattern. As regards textures, none are equal to linen, from the point of view of either appearance, durability, or manipulation. For delicate silk work, the fine linen batistes are very valuable, though their flimsiness may be an objection to inexperienced workers. Linen damasks, especially those with

a geometrical type of pattern, are unusual and very pretty. Silks, satins, and velvets are all good if the quality is satisfactory. As regards colour and tone, white and the various delicate shades of the unbleached fabrics are generally the most satisfactory, and certainly the easiest to arrange colours upon. Black and dark blue are two of the best varieties to employ if a dark ground is wanted. When choosing coloured linens, one of the most effective is dark blue; pinks, greens, yellows, etc., even though good colours in themselves, are usually best avoided as embroidery backgrounds. It is a different matter when applied or inlaid work is in question, for excellent effects can be obtained by a mixture of variously coloured linens perhaps edged with couched flax threads of the same dyes. This matter of the mixture of different kinds of dyes is of importance; the reason why backgrounds of coloured silks and satins at times seem unsatisfactory, not apparently blending well with the work, can sometimes be ascribed to the ill mixing of the different kinds of dyes.

When the fabric and the colour of the ground are settled questions, there are many possible embroidery treatments of it. Perhaps the most perfect ground of any is one that is entirely covered with stitching. For one thing, it has the advantage of being arranged by the pattern designer, and so is more likely to be in perfect relation to the pattern on it. The XIIIth-century workers knew this, and in their finest productions they completely covered over the ground with a subsidiary pattern executed in fine gold thread. There are many ways of solidly embroidering backgrounds. For rich work there is no material finer than gold and no method of embroidering it better than the ancient *point retiré* (see fig. 82, Part V). After this come various ordinary couching methods, also quite pretty. Fig. 106 illustrates one. This is taken from

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an Italian XVth-century picture, the subject of which is an interior with a number of figures in it. The wall is covered with

canvas stitches, such as cross, two-sided Italian, and plait, are useful as solid ground stitches. They were made much use of

Fig. 106

closely couched fine gold, which is intentionally left without being tied down in parts so that a repeating flower sprig stands out in relief, the whole making a rich setting to the group depicted in front of it. Various

Y

in this way in some of the Italian XVth-century work.

For more lightly worked grounds, darning, done either irregularly or in a pattern, is a suitable method to use. This can be carried

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out in several distinct ways. There is a kind of work in which both pattern and ground are darned closely with coarse silk, all the stitching following the direction of the outlines of the pattern. The finer kinds of darning make delightful grounds, and there is variety in them. A simply contrived ground of this kind can be seen in Plate XXII, where close, horizontal lines of irregular darning are worked in alternate bands of blue and white. The design upon it is, in this case, in outline, which is often an effective treatment. A pretty variation on this would be to introduce a rainbow of colours instead of only two. The simplest darned ground of any is an irregular, open darning, the lines not being placed closely together. This is illustrated in fig. 68, Part IV. If more refinement is called for, let the darning be done in pattern instead of in irregular fashion. This means that the stitches are picked up in a regular sequence, which is done by counting the

drawn in such a way that the worker can count the threads of the ground fabric and actually copy it. Fig. 107 suggests other patterns of a rather more simple nature.

Fig. 108

Fig. 107

threads of the ground for the first line or two. This method is more tedious than the other, but also prettier. Fig. 105 illustrates a rather complicated pattern darn; it is

Fig. 108 shows that this method can be of still greater complexity. In this case the darning, taken in two directions, meets in the middle, forming there a very interesting texture, especially if two suitable colours are used. This example was taken from a sampler dated 1808. Pattern darning is applicable to many kinds of embroidery, the backgrounds of heraldic shields, conventional draperies, and much small fine work.

Besides these entirely covered grounds there are others, more lightly decorated, that are very pretty. One of the most commonly seen is a small sprig or leaf repeating at regular intervals; another is a regular all-over small pattern such as trellis, shell, or a meander. It is wonderful to see the improvement made in a floral design by working a geometrical pattern in outline over the ground. Quilting gives some of the best examples, as an evenly worked ground is a necessity with the type of work. The frontis-

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piece is an example in point. It is an embroidered coverlet, with a most complicated subsidiary pattern worked over the ground. In fact, the ground pattern is by far the more interesting of the two. The piece measures about three feet four inches by two feet eight inches, and is of early XVIIIth-century English work. The floral pattern is embroidered in coloured silks, and the quilting pattern is carried out in white thread in back stitch. All kinds of geometrical patterns can be deciphered upon it, and round the border a series of panels is arranged, filled with most curious little designs. One, occurring on the lower border towards the right-hand side, contains

a shield-of-arms, a date, 1703, and the initials "E. S." Continuing from this point round the border in the direction from right to left the following subjects can be made out: two fishes in water, a church and above it a star and a sun, a three-masted ship and a crescent moon and two stars, a horse with a floral background, a griffin and a sun, a sea-horse in water, a dragon amongst foliage, a castle, a female figure holding a flower in each hand, an oak-tree with acorns and underneath a dog and a rabbit, a mermaid holding a comb and a mirror, a hound with floral background, a merman, a lion amongst foliage, a peacock.

G. C.

A NOTE ON THE PRESERVATION OF WORK

MOST people either inherit, acquire, or work embroideries that are worth careful preservation, so a word on this subject may be of interest. The safest of all methods is to frame and glaze the object, for if properly carried out this protects from dust, moth, and to a great extent from variations and impurities of atmosphere. If the framed work is hung upon a damp wall its contents will certainly be affected in time, so anything approaching that should be avoided. When there is danger of the colour fading the work should be exposed only to moderately strong light.

If the work is in a bad condition wonderful results can be obtained by expert cleaning, but there are occasions when careful home washing is the best plan to adopt, for the chemicals sometimes used in cleaning may prove injurious. Gold that is slightly tarnished can at times be brightened by hammering it all over with a smooth clean hammer; this burnishes it. Frequently, however, it is not possible to do this, for the silk work may be too much mixed up with the gold.

Interesting examples of old work, if not suitable for framing, should at least be preserved in drawers; it is a pity to make use of them for everyday practical purposes. To turn family samplers, woolwork curtains, or similar treasures, about which there is an aroma of personal historical interest, into antimacassars, table-covers and the like is an objectionable practice for several reasons. The materials not being new are too fragile to stand daily wear; also it cheapens their value to be put to such uses. There is a certain tribute of respect paid to an embroidery if it is protectingly framed and placed upon the wall as an object of interest and beauty. By this treatment its value is enhanced, but when turned into some kind of ornamental duster or what not it is valued accordingly. The beautiful little woolwork curtain referred to above was eventually framed, but, in spite of all cleaning efforts, there remains upon it, in the centre, a circular grey disc about two feet in diameter, the mark of the top of the table upon which it had lain for years.

PLATE XXII. AN EMBROIDERED VEST, COLLAR, AND CUFFS

THE embroidered vest and cuff illustrated in Plate XXII are part of a set which would include a collar as well. The collar, the only portion not illustrated, is very similar to the cuff, and consists of a straight band two and a half inches in width by thirteen and a half inches in length. The design upon it is the same as that upon the cuff, with extra sprigs of flowers added at each end to decorate the additional length of material.

As usual, the reproduction is slightly reduced. The originals are of a stock size (neck $13\frac{1}{2}$, cuff $7\frac{1}{2}$), and it is quite easy to alter these sizes to suit particular requirements. This can be done by adding or taking away some background at the margins, a process which need in no way interfere with the pattern. It is a design equally suitable for a child or a grown-up person, and can be used with either a blouse or a dress. The blouse might be white or of the pale blue colour of the ground, and either of silk or of linen.

To carry out this piece of work is quite a simple matter, for few and easy stitches are employed. Perhaps the scheme of the work is rather an unusual one, for the background has the greater part of the stitching upon it, the pattern being only in outline. The special characteristic of this piece lies in the horizontally banded ground, displayed by means of alternating colour. This is an ornamentation easily devised and carried out, and always effective, whether applied to a piece of embroidered work or the wall of a cathedral. Irregular darning covers over the background; it is easy to do, and gives a bright and glossy surface that is particularly suitable to dress embroidery. Stem stitch

works all the stems and all the flower and leaf outlines. Buttonhole stitch, chain stitch, and French knots are used occasionally in the centre of flower or leaf. These stitches have all been described and illustrated in previous numbers. The colour scheme consists of two shades of pink, two of gold, two of green, three of blue, and white and black. All the stitching is done with single thread, in "Filo-floss" silk upon a fine white linen ground.

Begin the embroidery by working all the stems in the darker shade of green. When these are completed, the background should next be worked. This is done in close, irregular darning in horizontal lines to and fro. Fig. 68 in Part IV illustrates this method of working, the only difference between that diagram and the present example being that the lines of darning must be placed close together in order to hide the ground completely. It is as well first to darn over the traced lines that mark the changes of colour, which will be alternately to blue and to white. When this is done, all the ground between these lines can be filled in, in pale blue or white alternately.

When working the background be careful to take the stitches close up to the traced lines of the pattern, otherwise the outlining will not cover the edges of the darned ground. The stitches can quite easily be slipped underneath the worked stems as they come across them, and it is better to have worked these stems beforehand, as they will be more firmly drawn. About one-eighth of an inch is a good length for the darning stitches, but they can vary a little—if much longer, they will not be durable.

When the ground has been done, the

A VEST, COLLAR AND CUFFS.

(For particulars see the last page of this Part).

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outlining of the leaves and flowers can next be undertaken. The leaves are all worked in the paler shade of green in stem stitch; those of a larger size have a vein worked down the centre in either stem, chain, or open buttonhole stitch. The flowers are all carried out in two shades of their respective colours—buds always in the darker shade, and open flowers mostly in the lighter shade; occasionally, as can be seen in the illustration, these are worked in the darker shade. The calices of the flowers are worked in the darker shade of green. The daisy-shaped flowers have a circular band of open buttonhole worked round the centre, and a black French knot at the centre. All the flowers have either a black knot or a tiny circle of black at the centre, whether otherwise decorated or not.

In the illustration two lines of stem stitch are worked round the edge of vest and cuff, the inner line white, the outer one pale blue. This can be omitted if unnecessary, or a pretty ornamental narrow border devised to replace it and at the same time enlarge the work. Numbers of small running borders can be found in former parts of EMBROIDERY.

This piece of work might be carried out in several other ways. The ground need

have no work upon it, in which case the flowers might be carried out in shaded satin stitch. If the ground is not worked, semi-transparent batiste would be a very delicate and suitable material to work upon. For an extremely simple piece of work the pattern might be carried out in outline in stem or chain stitch in the colours of the worked example. It is quite a suitable design for carrying out in fine white embroidery. With this, the centres of the flowers might be in pretty *à jour* fillings, the larger leaves have open-work lines down the centre, and be worked on either side in satin and back-stitch fillings.

Any one familiar with the methods of fine white embroidery could make a dainty vest and cuffs of this with the help of a delicate ground such as muslin or batiste.

The following "Filo-floss" silks have been used to work out this design, about five skeins each of 177 and 11, two each of 49 and 50, and one each of all the rest:

Background, White . . .	No. 177
" Pale Blue . . .	No. 11
Pink flowers . . .	Nos. 139a, 140
Blue flowers . . .	Nos. 221, 222
Yellow flowers . . .	Nos. 92, 129
Green leaves and stems . . .	Nos. 49, 50
Black . . .	No. 178

G. C.

THE EMBROIDERED STORY OF THE NORMAN CONQUEST AT BAYEUX

THIS work, which every one has heard of by the name of the Bayeux Tapestry, is of worsted embroidery on a strip of linen about twenty inches wide and nearly eighty yards long. It is of great importance in many ways, being one of the authorities for the Norman Conquest, giving facts not otherwise recorded, and offering a wonderful picture of the manners, costumes, and arms of the time. For a long time its history and origin have been discussed, but as some of the most recent French authorities have come to the conclusion that it is an English work, it may be of interest to students of embroidery if we give an abstract of their reasons and, if possible, add to them. (See the official Guide prepared for the Congress of the French Archæological Society, Caen, 1908.)

The so-called tapestry is a needlework of worsted of several colours—dark and light blue, dark and light green, red, yellow, black, and grey. Some parts are only in outline, others are covered with couching. At the top and bottom are narrow borders filled with birds and beasts, fables and scenes, some of which have reference to the main story. Over five hundred figures are represented in the central band, forming about sixty scenes. These must, it is obvious, first have been thought of in larger episodes or “acts” of the drama, for which the following distribution may be suggested.

The broadest division is into two parts: (*a*) events leading up to the war, and (*b*) the war. Then (*a*) may be further subdivided thus: (1) Harold puts to sea on an expedition, but is driven to Flanders and taken prisoner by Count Guy. (2) Duke William demands that Harold should be given up, and he is taken to Rouen. (3) Harold goes

with the Duke into Brittany, and returning to Bayeux he makes an oath in William's favour concerning the English succession before a shrine of relics. (4) Harold returns to England, Edward the Confessor dies, and Harold is crowned; a warning comet appears in the sky. (5) A messenger from England informs William, who prepares for war and builds ships.

Section (*b*) may be divided thus: (6) The army embarks and crosses the sea to Pevensey; they land, gather food, feast, and form a camp at Hastings. (7) William receives information of Harold; the army leaves Hastings, and Harold hears of the advance. (8) Duke William gives his commands, and makes the attack. (9) The battle and victory of William. (10) Flight of the Saxons (incomplete).

This grouping of subjects is to some degree conjectural, but there can be no doubt as to the broad distinction between (*a*) events leading to war, and (*b*) the war itself. The former seems spread out, as if to fill up half the space; and it is to be remarked that the first subject of the (*b*) group begins (and only this one so begins) with a $\perp$, a well-known sign of commencement. If a division into two equal parts were in the plan of the work, it would give us a check on the original length and contents of the strip, the end of which is lost. The battle subject is evidently nearing its completion with the death of Harold and flight of his host; but if the group (*b*) occupied as much space as (*a*), then it would have been a yard or two longer than the existing portion, and might very suitably have been filled with the burial of Harold, or Bishop Odo giving thanks for the victory.

It has long been recognised—as, for instance,

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by Mr. Fowkes, in his excellent and fully illustrated account—that it must have been ordered by Bishop Odo and given by him to his cathedral at Bayeux. But Mr. Fowkes, after considering the possibility of the work being English, came to the conclusion that it was probably made by Norman workpeople at Bayeux itself. On the other hand, Freeman inclined to the view that it had been made in England, and Dr. Rock, an excellent authority, thought that it was probably London work. That this embroidery was made for Odo, the half-brother of the Conqueror, is shown by its presence in the cathedral which he had built, and, more, by the very prominent position which he takes in the design—a part so prominent that only his personal interest and the local interest of Bayeux could have been the cause of it. The Confessor, Harold, and William *had* to stand out in the story, but Odo makes a fourth, while no other great ecclesiastic or baron, except once Odo's brother Robert, appears at all on the Norman side.

The culminating scene of the first half of the work, Harold's oath on the relics, takes place at Bayeux, and three other scenes in the story are specially devoted to the Bishop's glory. The first of these is the building of the ships, where Odo is shown as the adviser of William. These two appear seated together on a high seat. On one side a messenger from England tells the news; then Odo speaks, while the ship-carpenter waits for instructions. This scene is entitled, "Here Duke William orders ships to be built." The second Odo scene is that of a feast after the landing in England. Odo and the Duke are seated in the places of honour, and the former says grace: "Here the Bishop blesses the food and drink." In a second compartment of the same scene Odo is shown seated with the Conqueror and Count Robert on a high seat, their names written above them:

ODO EPS.: WILLELM: ROTBERT.

Again the Bishop speaks, doubtless counselling the advance. Another scene shows how in the battle "Odo, with his raised staff [*bâton* of command], encourages his vassals." This shows his intervention at the most critical moment of the great battle,

Fig. 109

and is a parallel to William showing himself to the troops. The battle was not the victory of Duke William alone, but of William and Odo, seems to be the argument.

It has been urged that the Bishop would hardly have dared to make such a claim while the Conqueror himself, who indeed imprisoned him for his faults, was alive, and that therefore the work must be assigned to the period between the death of William, 1088, when the Bishop again returned to England, and his own death in 1097. A reasonable, and, I think, better alternative to this view may be suggested. The Bayeux needlework history is less the whole story of the conquest of England than a picture of the relation of Bayeux and its Bishop to the war. Some reasons have been given for thinking that some named minor characters who appear, VITAL, TVROLD, WADARD, were also associated with Bayeux and Odo. If this were indeed so, it would go far to prove the interpretation which has just been suggested.

Odo was not only Bishop of Bayeux, but he was a great lord in England and Count

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of Kent. There is therefore just as much likelihood that the work was wrought in England as in Normandy, and that it is an English work is proved by three considerations: (1) by the style of the lettering (see fig. 109, an alphabet from the inscription), drawing, and ornament, which recalls that of the Irish and Saxon MSS., especially in the borders, and trees with interlacing branches; (2) by the English spelling of the names, such as Eadward, Wilgelmus, and other words such as Ceastra, also in the use of the Saxon barred *ð*; and (3) by the pre-eminent fame of England for embroideries. These arguments apply not only to the needlework but to the drawing of the design, while the selection of the subjects treated must have been decided by Odo himself.

I may suggest one other point in favour of English origin. This is the accuracy with which the facts as to Westminster are rendered. The Confessor had dedicated the fine new church which he had built, which

was a wonder in the land, only a few days before his death, and here he was buried, as shown on the embroidery. Its situation, just west of the palace, is also correctly indicated, and that it was hardly finished is shown by a man fixing the weather-cock, while its dedication seems to be referred to by the "hand of God" in the sky. Further, although many buildings are depicted, such as the palace at Rouen, the abbey of Mont St. Michel, the cities of Bayeux, Dol, and others—all these are indicated by mere symbols of buildings, whereas Westminster Abbey is a carefully drawn view of a great church, with a tall central tower and no western towers, thus agreeing with the actual facts. Notice, finally, the intimacy of the inscription. The church is not named as Westminster, or the Abbey outside London, but the inscription runs: "Here is carried the body of King Eadward to the church of St. Peter the Apostle."

W. R. LETHABY.

PLATE XXIII. DESIGN FOR A BLOTTER OR A BAG, A PORTION BEING ADAPTABLE FOR A PIN- CUSHION COVER

A DESIGN for an embroidered blotter cover is shown in Plate XXIII. It is slightly reduced in the reproduction, the size of the original being fourteen inches by nine. It is worked in "Washing Filo-selle" silk on white linen, mainly in shades of blue, green, pink, grey, and fawn, with a little yellow, white, and black. The design is based on geometric and naturalistic elements, and has been so arranged that the central square containing the bird and spray may be worked separately and used as a pincushion cover, or for other small square objects. Or, again, the whole design, worked on a smaller scale, would look nice as a bag.

The stitches used in carrying out the design are chain, stem, satin, and French knots (the explanation of these will be found in Part I), irregular darning (in Part IV), fishbone stitch (in Part V), long and short, and feather stitch (illustrated in figs. 110 and 111). With one or two exceptions the silk has been used double; these exceptions will be noted as they occur.

The bird is worked principally in long and short stitch, with the addition of fishbone, satin, and stem. The commencement of long and short stitch is illustrated in fig. 110. The succeeding rows would be filled in with either long and short stitches

PLATE XXIII.

DESIGN FOR A BLOTTER OR A BAG.
(For particulars see the last page of this Part).

or stitches of equal length, as may be required. In the present case the stitches follow the direction of the bird's plumage. The arrangement of the colours, mainly blues and fawns, will be most easily seen

Fig. 110

from the accompanying plate. The mingled effect of blue and green on the back and neck has been obtained by using one strand of light blue and one of light green in the needle at the same time. The long feathers of the wing are worked in fish-

bone stitch, and the smaller ones, at the top, in satin stitch. The beak, the terracotta band, and the eye are also in satin stitch. The white spot in the eye is made by three small stitches in the form of a triangle, and the circle round the eye is of stem stitch in dark blue. At the finish an outline of stem stitch with a single strand of the darkest shade of grey is worked round the bird. At the top the legs are of open chain in red; this changes to ordinary chain for the lower part and the feet; the latter terminate in a single satin stitch of black to form the claws.

The fly is in satin stitch, terracotta for the body and black for the head, with a little white to suggest the eyes. The wings and legs are outlined in stem with a single strand of black. The spots on the body are made with a small satin stitch of black, worked over the terracotta.

The berries are composed of French knots. Commencing at the centre with one red, six white ones are next fitted round it, and outside them a circle of pink ones, placed very closely together. Between each pink French knot a satin stitch is taken from the centre out-

Fig. 111

wards with a single strand of red. These stitches project a little beyond the circle, which gives a pretty star-like effect to the berry. The leaves are worked in a variety of feather stitch, one half in the light shade of green and the other in the dark shade. Feather stitch, as used for these leaves, is illustrated in fig. 111. A double line of it is worked down each leaf, and it is made to vary in width according to the shape of the form it is filling. The darkest shade of fawn is used for the stem, the thin part being composed of a single row of stem stitch, and as it increases in width, two rows are worked, one on each outline, whilst the intervening space is filled with several rows of stem stitch in light green.

The knots forming the interlacing pattern are worked in chain stitch with double silk. One has a strand of light blue and light grey in the needle at the same time, and for the other light blue and yellow are used together. By this method of working with strands of different coloured silks many more tones can be obtained.

The border at the top and bottom is filled in with irregular darning; the ground is worked in blue and the white linen left plain in order to form the pattern. The darning stitch passes over about five threads of linen and picks up one thread. The stitches are arranged so that in the succeeding row the thread picked up comes in the centre of the long stitch of the former row, which gives a basket-like effect. The pattern is finally outlined in chain stitch with a single strand of pink. The diamond shapes in the centres of the circles are in blue. The grey and blue chain stitch of the interlacing is carried around the borders and the sides of the blotter.

The design might be used successfully for a bag, and as an alternative colour scheme it could be worked entirely in varying shades of blue, or in blue with gold introduced in the more important features of the design. If used for a pincushion

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cover or a d'oyley, the central portion only would be worked.

One skein of each of the following numbers of "Washing Filoselle" silk has been used in carrying out the design :

Blues	Nos. 178xx, 179, 20e, 20g.
White	No. 72.
Fawns	Nos. 45l, 45h.

Drabs	Nos. 30b, 30d, 30f.
Grey	Nos. 206, 206d.
Red	No. 68.
Pink	No. 47.
Old Gold	No. 99a.
Green	Nos. 84, 86.
Terracotta	No. 95.
Black	No. 82.

MARGARET SCHOLFIELD.

AN ENGLISH HANGING OF THE XVIITH CENTURY

THE truly native element in English art is commonly regarded as a certain rough and crude originality, in character with the natural instincts and habits of the nation. This may or may not be an entirely true judgment of the people ; it is certainly not always true of our art.

If we were to study, for example, what remains of the sculpture and ornament of our Gothic cathedrals and churches, we should find, mingled with much that is somewhat crude and untutored, an element of refinement and beauty which is too constant to be explained merely as due to influence from abroad, if not actually to the presence of foreign workmen. But we are not now concerned with architecture. It is probable that if we knew more of the development of the art of embroidery in England, much new light would be thrown on the history of English art in general.

It is undisputed that, six or seven centuries ago, English embroidery challenged comparison with that of any foreign country ; but it will not be so readily conceded that in far more recent times its excellence was still remarkable. To pass from the foolish, if quaint, "stump" work of the earlier Stuart period, with its ridiculous attempts to depict sacred scenes or royal personages in landscapes, to the hangings embroidered in the later years of the same century, is to cross the gulf between an almost contemptible

mediocrity and fine art. What could be more effective and suitable for its purpose than the embroidered curtain in the illustration ? (fig. 112).

The task was to cover with embroidery a set of large curtains and valances for a bedroom. To do this in a minute and elaborate fashion would take a lifetime, and an embroideress is, after all, entitled to enjoy some of the benefits of her work done ; moreover, the loosely hanging folds of the curtain would destroy all the effect of such delicate skill. In this instance we have a kind of work quickly and easily done, and beautiful in use—a design of which the effect is in no wise injured by the folds of the curtain.

There is a great deal of such work still to be found in the country. Much has been removed from the old English mansions and country houses, where it would be seen to the greatest advantage, to the uncongenial surroundings of a West-end shop, or (be it said) to the galleries of museums. Much more has been irreparably injured by the far too popular process of "relaying," which does for the work what a child might do to a fine old engraving if provided with a pair of scissors. The material of these old curtains should be noticed. The warp is of linen and the weft of cotton. The latter material had not then been long used in this country. Its softness forms an agreeable ground to the dull lustre of the thick

Fig. 112

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woollen threads of the embroidery. But the cotton thread was perhaps not considered strong enough for the warp, and so another material was used.

Embroidery of this kind is peculiar to England. The earliest examples show more distinctly the derivation of their pattern than that now under consideration, which dates from the last years of the seventeenth century. In the earlier work is generally to be seen a row of trees with bright-coloured flowers, and birds of gay plumage, growing from mounds of earth over which run animals absurdly out of scale with the immense flowering trees above. But these mounds nevertheless form an agreeable base to the general pattern. In looking at the mounds and trees, we are reminded of those Indian cotton coverlets generally known as "palam-pores." In them, too, we see the trees and birds, the mounds and animals, though interpreted in a more conventional and Oriental fashion. The trade relationship between Western Europe and India in the seventeenth century, to which must be traced the origin of such Orientalising art as Delft pottery, and English and Dutch lacquer-work, is responsible for the general idea of these English embroideries. But a glance will show that

the work is no slavish copy, and towards the end of the century hardly a trace is left of the influence of the hand-drawn and painted cloths of Masulipatam.

Occasionally a date is to be found embroidered on these curtains. A set of hangings which came under my notice a few years ago bore a date in the last decade of the seventeenth century. In them the tree-stems were more regularly placed, and the foliage was relieved by birds, but the principal characteristic—the treatment of the large leaves as a ground for various smaller patterns—was the same. There was also another point in common. The variety of colour, with other elements of the earlier work, had been set aside, and the design was entirely carried out in shades of green. This colour-scheme is not uncommon in work of the kind, though the fading away of the yellow, so noticeable by a comparison of back and front, has generally left the work of an indigo-blue colour.

The period over which this style of design was in vogue was not long—barely half a century; but there is still room for further development in ways which will easily suggest themselves to trained workers in embroidery.

A. F. KENDRICK.

PLATE XXIV. PART OF A DESIGN FOR A COT COVER

PLATE XXIV illustrates one spray, a part of a design for a cot cover. The size of the whole cover is twenty-four by thirty-four inches, and the design, as it would appear when complete, is illustrated in fig. 113. In the coloured plate all the varieties of flowers are shown, so that the entire cover can be worked from it. The ground is white linen embroidered with four sprays treated in a rather conventional manner. "Mallard" Floss is the silk used, the colours being two shades of pink, two of blue, two of yellow, three of green, and a touch or two of black.

Chain, double back, satin, stem, buttonhole, single back, and Roumanian are the stitches employed, with French knots for some of the centres. These stitches have all been described in previous numbers.

The inner outline of the large leaf is worked in open buttonholing of the palest green, with a line of dark green chain stitch and dark blue stem stitch on the outer edge. The green used in this chain stitch is not required in any other part of the cover, the other greens being of a much greyer tone. The large pink flower in the upper half of the leaf has its outer edge worked in open buttonholing of deep pink, with stem stitch of paler colour inside; the five circular petals in the centre are worked in close buttonhole, while the centre itself is formed by a ring of dark green stem stitch with a black French knot.

A wide stem stitch of pale blue, with dark blue back stitch to define the outer edge, is used for the largest blue flower; a ring of pale gold stem stitch with a black dot forms the centre, with stamens worked in deep gold stem stitch.

The small flower, close by, is outlined in

dark blue stem stitch, with pale blue satin stitch centre and French knots. Outline stem stitch is also used for the other small blue flower, which is varied by having the alternate leaves filled in solidly with Roumanian stitch.

In two of the gold flowers, stem stitch of deep gold radiates from the centre, with the interstices filled with pale gold satin stitch and a black French knot in the centre. The smaller flowers are worked in deep gold buttonholing, leaving a plain piece of linen in the centre and placing a black French knot in the centre of each.

The large pink flower in the lower half of the leaf is outlined with pale pink stem stitch, with an outer line of deep pink back stitch; the centre is formed by two rings of back stitch in blue and gold, and the petals are ornamented with blue and pink spots.

The two pinks are outlined in stem stitch, using deep colour in the large flower and the lighter shade in the other; the zigzag edge is worked in pale pink satin stitch, and all the petals are spotted with pale pink spots at regular intervals. A black French knot forms the centre of the flower.

All the small leaves are worked in pale green double back stitch and the stems in dark green stem stitch. Care should be taken to work the stem stitch closely and regularly or the effect will be clumsy.

The flowers in the lower left-hand spray are all worked in outline. The blue one has two rows of back stitch in two shades, and a pink satin-stitch centre outlined with black back stitch. Pink chain stitch with blue satin stitches between the leaves is used for another, with the centre formed of deep blue back stitch with a black French knot. The third flower has a deep pink chain-stitch

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outline with pale blue satin stitches between the leaves, and a circle of pale blue back stitch with a black French knot for the centre.

The gold berries are worked in button-

paler shade; inside this again is a line of deep pink stem stitch, with bars across the middle of the petal; a line of deep gold stem stitch with a black French knot forms the centre.

Fig. 113

hole, two of pale gold and one of deep gold, with a French knot in the centre and satin stitch of green between the gold berries.

The flower in the smaller spray above is worked in two rows of stem stitch, the outer line dark blue and the inner one of the

The flower at the top of the leaf on the left has its two side leaves worked in a single line of deep pink chain stitch, the centre leaf being worked in pale pink buttonholing with black French knot in the centre of the flower.

PLATE XXIV.

PART OF A DESIGN FOR A COT COVER.

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The top right-hand flower is outlined in deep gold chain stitch, with lines of pale gold crossing up and down the centre petal, tied down at the intersecting points with deep gold; a black French knot forms the centre of the flower. The small trefoil is worked in pale pink satin stitch outlined with stem stitch of pale blue.

The four-petalled flower below is outlined with back stitch in two shades of pink; a circle of blue back stitch with satin stitch inside it is used for the centre; the stamens between the leaves are worked in dark blue.

The forget-me-not flower is worked in open buttonhole from the centre, with a pale gold dot in the middle.

The interlacing knot, shown in the centre of fig. 113, should be in gold, worked in satin stitch.

The edge of the cover might be hem-stitched, or finished with a band of stitches arranged in a simple geometrical pattern.

The following "Mallard" Floss silks have been used in carrying out this design:

Blues, Nos. 62, 179	.	.	.	2 skeins each.
Yellows, Nos. 119, 121	.	.	.	1 skein "
Pinks, Nos. 23, 66x	.	.	.	3 skeins "
Green, No. 233b.	.	.	.	7 " "
Greens, Nos. 233d, 162	.	.	.	3 " "
Black, No. 82	.	.	.	1 skein "

K. PAVEY.

THE TRANSFER OF PATTERNS

UNLESS the tracing on of the pattern is perfectly executed it is impossible to produce a perfectly satisfactory piece of work, so it is well to master the best ways of doing this. It is interesting to examine the actual marking on of the pattern in some of the old work. This is possible sometimes; an instance to the point is on the Cope of the Passion at St. Bertrand de Comminges, an example of English XIVth century embroidery of the same standing as the example in the frontispiece of Part V. In some of the more exposed parts the finely worked silk has completely worn away and the outline of the pattern is visible. Some of the figures and animals are exposed in this way. They have the appearance of being drawn on in ink with a fine brush, and the drawing is so good that the whole of the form is suggested by the outline. After-drawing with needle and thread is always difficult to do well, so it needs all assistance possible from the pattern. The drawn or traced outline should be a fine, clear, decisive line, for if ill-drawn or clumsy it is of little use.

Professional embroidery work-rooms possess various mechanical aids beyond the reach of the ordinary worker. There is an expensive machine for pricking through the pattern, and various special preparations for the pounce. The ordinary worker has to prick round the outlines with a needle fixed into a handle, and to use finely powdered charcoal or chalk for pounce. The process for this method is as follows: place some tracing-paper upon the design and take an accurate outline of it. Next, place the tracing upon some soft porous substance such as thick felt and with a fine needle prick a close succession of small holes along the pencilled lines. The closer and finer these are the better. Then with drawing-pins fix the ground material with the pricked tracing upon it upon a board, then dip a pad made of some soft material into the powdered charcoal and rub it firmly once across the perforations of the pattern, which should have been laid down with the rougher side uppermost. If on examination any portion is found to have been missed, any additional rubbing must be taken in the same direction.

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On removing the tracing-paper a fine clear print of the pattern should be visible upon the material. If too much powder has gone through, blow some lightly away, and proceed with a very fine brush to paint the lines of the pattern with light red oil colour thinned with turpentine. Blow or flick away with a duster any remaining powder, and the tracing is complete. Water colour can be used, but it is not as permanent as oil.

There are other ways of tracing on patterns. One is to transfer by the aid of tarlatan. This is a quicker method, and often quite a satisfactory one. Tarlatan is a material of the nature of starched, coarse muslin. To

transfer the pattern proceed as follows: pin a layer of tarlatan over the design, which must have a clearly defined outline in order to be visible through the semi-transparent overlay. Next, trace the design upon the tarlatan with a pencil or a brush. This completed, lay the tarlatan upon the ground material, and pin them both down upon a drawing-board. Then with a fine pen dipped in Indian ink run over the traced lines; if this is done correctly, just enough of the ink will penetrate, and a fine clear tracing of the design will have been made upon the material.

G. C.

OPUS ANGLICUM—II

THE FAME OF ENGLISH EMBROIDERIES DURING THE MIDDLE AGES

THE ornaments of St. Thomas of Canterbury at Sens, of St. Edme at Pontigny, of St. Bertrand de Comminges, and the numerous copes *de opere Anglico* reproduced in my book "*La Broderie du XI siècle jusqu'à nos jours*" and in its supplement, show, better than lengthy descriptions, the incredible richness of these works of art. Their favour, however, amongst the Roman Catholics is due, not only to their merits but also to the initiative of the sovereign Pope and of the cardinals by whom he was surrounded.

Matthew Paris tells on this point the following anecdote: "About the same time (1246) my lord Pope, having noticed that the ecclesiastical ornaments of certain English priests, such as choral copes and mitres, were embroidered in gold thread after a most desirable fashion, he asked whence came this work. 'From England,' they told him. Then the Pope, 'England is for us surely a garden of delights. Truly a well inexhaustible; and there where so many things

abound may much be extorted.' Thereupon the same lord Pope, moved by the desire of the eye, sent letters blessed and sealed to well nigh all the abbots of the Cistercian order established in England, desiring that they should send to him, without delay, these embroideries of gold which he preferred above all others, and with which he wished to decorate his chasubles and choral copes, as if these acquisitions would cost him nothing. This command of my lord Pope did not displease the London merchants who traded in these embroideries and sold them at their own price."

It is evident that from the beginning of this epoch the treasury of the Holy See supplied itself largely with orphreys of English work, and that the cardinals followed the Pope's example. We see them giving, in France, in Spain, and above all in Italy, either in their lifetime or by bequest, the admirable copes, some few of which are still in existence. It was thus that Bertrand de

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Gouth, Bishop of St. Bertrand de Comminges, afterwards Archbishop of Bordeaux and Pope under the name of Clement V, left, after a visit made in 1309 to his first cathedral, the Cope of the Passion and that of the Virgin. These are without doubt most beautiful specimens of *opus Anglicum*. In the same way Pius II left a superb cope

initiative taken by the Pope and the cardinals favoured the diffusion of English embroideries. They owed their distribution, however, to other causes as well. I will mention some of them. In the first place we see kings of England or noblemen sending or bequeathing precious embroideries to certain churches in France. Thus Raymon,

Fig. 114

to the cathedral of Pienza. What can be said of the cope of the Cardinal Albornoz at Toledo? It is perhaps the most remarkable of them all. The Cardinal Nicolas Cappuci, who died July 26th, 1368, bequeathed to the Cathedral of Valence, of which he was the head, a cope of English work with divers figures on a ground of blue. I could mention many others, but what is the use? It is evident that the

Archbishop of Embrun from 1318 to 1324, received from King Edward II a green cope embroidered with gold and silver, on which were represented all the kings his predecessors. It disappeared in the pillage of the church in 1585. The same sovereign paid two hundred marks for a cope which was to be a present from the Queen to the Pope.* The cathedral of Rouen possessed twenty-one copes, one chasuble, and two tunics of

* "Textile Fabrics," by Dr. Rock, Introduction, p. 10.

red velvet powdered with *sprigs of gold*,* of which the orphreys and the cope hoods of green velvet were charged with seraphim in embroidery of gold and silk; further, a large mortuary cloth of red velvet with rays of gold, in the middle of which is a cross of red satin edged with gold, given by the Duke of Bedford.

Besides this, bishops, noblemen, and kings of France vied with one another to procure the embroideries *de opere Anglico*; the ancient inventories mention this fact. For example, André de Ghini, Bishop of Tournay, gave in 1343 to his cathedral some rich ornaments, amongst others, "*Assam cappam veterem cum ymaginibus et fixio operis Anglicani.*" Jean de Cherchemont, Bishop of Amiens, bequeathed to his cathedral in 1370 some superb ornaments, amongst which "*Una capa solemnisis cujus campus aureus est de opere brodatore per totum cum historia nativitatiss XPI usque ad passionem et ultra et habet in circumferentia hystoriarum singularum nodos sive compassus insimul laqueatos, habet etiam rotas cum griffonibus in medio rotarum. Aurifrixium ejus operis Anglicani latum est et operatum cum tabernaculis et ymaginibus episcoporum et regum integris et subtus pedes ipsorum scripta sunt nomina singulorum de serico nigro. In capucio veri dicte cape est ab una parte ymago beate Marie et ab alia parte ymago unius episcopi stantis genibus flexis atque inter duos pomellos argenteos et hysmaltatos hujus modi capucii scriptum est; Dñs Johannes Cherchemont.*"

Contrary to the usual custom, the description of this cope of apparel, or of ceremonies, "*Solemnis*," is given in such detail that one pictures it perfectly.

The inventory of Phillipe le Hardi, 1404, quotes an episcopal cope of embroidery of gold, with many pictures upon it from the life of our Lady. In different parts of it is written the *Ave Maria*, and on the border

round the base is written the *Salve Regina*. On the orphrey are the twelve apostles, worked in relief in pearl embroidery, seated under canopies of pearls upon branches of raised gold, and people say that it was made in England.

I note in the treasury of the Saint Chapelle of Bourges in 1404, a cope of embroidery of *façon d'Angleterre*, pictured with the life of our Lord and of the creation of the world; and on the said cope are many divisions of fine seed pearls. Upon the orphrey of the said cope are animals and birds worked in white, red, black, and blue beads. These coloured beads were often employed by the English artists. Viollet le Duc, in his "*Dictionnaire du Mobilier française*," gives a specimen of an English orphrey thus decorated. Here again are some beautiful pieces from the same treasury. "Another cope of embroidery, *façon d'Angleterre*, with scenes from the life of our Lord and our Lady and many prophets and cherubim. The orphrey is embroidered with our Lord and His apostles, and it has many birds made of seed pearls. An altar frontal of embroidery, *façon d'Angleterre*, on which there are several embroidered scenes from the Passion of our Lord. The divisions separating the various subjects are made after the manner of masonry, and amongst them are birds of various kinds."

The following is taken from the "*Glossaire archéologique du moyen âge et de la Renaissance*," by Victor Gay, vol. i, p. 322. It is a quotation from an inventory taken in 1620 of the vestiary of Notre Dame de Chartres. There is very little doubt that it is English work, though the fact is not expressly stated. "No. 18. An embroidered cope with a ground of gold, both the orphreys and the body of the cope; the orphreys are decorated with quantities of seed pearls disposed in compartments enclosed with foliage. On the body of the cope is represented a river full of different

* The Society of St. Augustin published at Lille in 1892 a volume entitled "*Jeanne d'Arc et sa Mission Nationale*," by V. Canet. On page 129 there is a reproduction of a miniature, from a missal, of the Duke of Bedford kneeling before St. George. The hanging placed behind him and his *prieu-Dieu* is powdered with sprigs and with his device.

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kinds of fishes taking the form of a cross. Between the crossings are large crayfish. Upon the hood of the cope there is a crucifix accompanied by St. John and the Virgin, and at the base of the said cope a Virgin seated on a chair, and over the main

arranged alternately. The first, *gules, lions or*; the second, *gules, three lions passant or*. The said cope having a hood of the antique shape enriched with two censing angels. This cope is reserved for the bishop when making his entry."

Fig. 115

portion of the cope are the Apostles accompanied by different kinds of birds. Upon the right side of the orphrey there are heraldic shields. The first, *or, three chevrons brisés gules*; the second, *or, a fess between two chevrons brisés, one in chief and one in base, gules*. For the remaining part the same shields are reproduced alternately upon the orphrey. On the left side are six shields

The inventories of the Holy See, of Charles V, of Charles VI, the Dukes of Bourgogne and of Berri, and quantities of others, would furnish us with an ample harvest of descriptions, often too summary, many of them of embroideries *de opere Anglico*. I refer those who wish to obtain a more thorough knowledge to the above, in order not to exceed the space which has been allotted to me.

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As I do not wish to omit indicating any of the causes of the favour of the English embroideries in France, I must speak of the occupation of our country by the English during too many years. Masters of our land, they appear to have ordered to be sent over from their country a great number of embroideries, some of which, such as the XVth-century chasuble of blue velvet of the Museum of Nantes, are still admired at the present time.

Finally, before this sad epoch we see Charles de Blois order to be sent from England some ornaments for the cathedral of Rennes, and we find specimens described in the inventories of all our large churches. How did they come there? People did not always go to seek them. English merchants must have exported them to certain large fairs where the buyers and sellers of all the countries of Europe met together.

But we have had enough upon this subject. Let us pass on:

The characteristics of the embroideries of *opus Anglicum*:

- I. Before the middle of the XVth century.
- II. After the middle of the XVth century.

At each of these epochs we shall examine the architectural basis of the composition, the figures and the ornamentation, in order to grasp how these elements are distinguished from their analogous forms in other countries.

Before the middle of the XVth century, embroidery, like metal work, being a secondary art, naturally followed the contemporary architecture, sculpture, and painting. The workman was necessarily inspired by what he saw around him, and proceeded, as in architecture, from the simple to the complex.

At the Romanesque epoch he was satisfied with rectangular divisions to enclose his legends, the greatest deviation he admitted being circular medallions. Little by little he made the design more complicated and enclosed the subjects in medallions of a

quatrefoil shape (see fig. 114), as on the Syon Cope, or on that of Daroca at Madrid.

After having embroidered the medallions with twelve lobes separated by lines at right angles, as in the example at Anagni, he definitely abandons all compartments of this shape, which recall the shapes of the contemporary stained-glass windows, in order to make something new.

The type of design based on radiation accentuated itself more and more, not only in the rose windows of cathedrals and tessellated pavements, but even on the arches of certain English portals. This style suited semicircular copes marvellously well, much better, it must be confessed, than the medallions of the preceding century. Therefore this radiating plan was adopted with enthusiasm; the beautiful copes illustrated in "La Broderie" and its Supplement show this abundantly.

Upon rectangular pieces and upon orphreys occur arches and canopies, amongst which often appear (as in the metal work) angels "of divers countenances" abutting the *histoires*, composed either of a group of people or possibly only one or two figures. When looking at some of these orphreys one is reminded of certain miniatures from the Bibles, and of the larger missals. The embroiderer was in truth the brother of the miniaturist, he knew how to render with thread of silk and gold the wonderful illuminations of the most beautiful manuscripts. I have noted above how cleverly he placed the most important subjects in the portion of the cope which fell from the shoulders without fold, and how he avoided giving an oblique direction to the pillars of his arcading at that part.

If I have only unstinted praise for the architectural design of the embroideries *de opere Anglico*, I shall have less admiration for the figures. They have sometimes a brutal, cruel, ferocious air, quite unnecessarily exaggerated. In saying this I have specially in mind the cope of Harlebeke in the Brussels Museum. The figures have a movement, an

exaggerated realism, which recall certain XIIIth-century enamels. The dark beard often seems almost false, so sharply is it cut off from the person to whom it belongs. The draperies of the vestments are not free from stiffness, and, in short, if one compares the English figures with those of Florence, as I have arranged them in a plate of the Supplement of "La Broderie," any hesitation between their merits is impossible. Perhaps this is to be attributed to the climate, the genius of the country, and the type of the inhabitants. However that may be, with this reserve and with this appreciation that more than one will find severe, the nobility and the character of certain figures of Colonel Butler-Bowdon's cope, of the Tree of Jesse in the Spitzer Collection (see frontispiece, Part V), of the Bologna cope, and of many other pieces, compensate amply for the rudeness and barbarity of some examples noted above.

As to the characteristics which distinguish an embroidery in *opus Anglicum* from one of other origin, the following are a few appertaining to the architecture and ornaments. As each nation has its own genius, so the Romanesque and the Gothic styles have been treated at the same epoch with very distinct variations in France, England, Italy, and Spain. It has been the same in the interpretation of architectural forms in embroidery. Look at the arches with five lobes in Colonel Butler-Bowdon's cope or in the throne of the Virgin in the Tree of Jesse of the Spitzer Collection (see frontispiece, Part V)—they have an undeniable English character. Nothing in France resembles it. On the cope of Harlebeke and on some others the pinnacles separating the arches are divided towards the middle of their height by a little *quatrefoil*, a detail very characteristic of English work. It occurs in the beautiful English Psalter of the abbey of Peterborough at the Royal Library of Brussels. Also the crockets of the counter curves of arches are bristling with turned-over leaves of a style more advanced than in contemporary France. These re-

marks apply to the whole of the architectural design, but I must mention some minor details which are characteristically English: the lions' masks and the stars embroidered in guise of capitals; the bases of the columns replaced by lions, as in certain manuscripts; the interlacing branches which take the place

Fig. 116

of columns (see fig. 29, Part II) and encase figure subjects; finally, the birds of brilliant plumage perched in profusion between arches and on orphreys, as on the cope of Pienza. It seems that the position of England, surrounded by the sea on all sides, has provoked in its inhabitants the passion of travelling over the sea, and they came to know, before continental nations, of the parrots and other birds of brilliant plumage so often reproduced in their needlework. How strange sometimes are these assemblages of arcading, branches, foliated masks (fig. 115), and varied animals—for instance, on the cope of St. Bertrand de Comminges.

II. After the middle of the XVth century.

A radical change comes suddenly. The English embroideries of the end of the XVth century and of the commencement of the

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XVIth reveal a rapid degeneracy. The fabrication of the ornaments of the Church becomes much more a matter of trade than of art. It seems it was necessary to produce quickly and cheaply. The badly designed orphreys are covered with figures that are too short and very coarsely worked. On the chasubles a Christ is constantly pictured, accompanied by angels, emerging from a cloud and presenting cups of gold to receive the divine blood. But the body of the cope or of the chasuble, almost always of plain velvet, is powdered with seraphim mounted on wheels holding an inscription *Da Gloriam Deo* or *Gloria in Excelsis*, or with fleur-de-lis, stars, double-headed eagles, or very elegant sprigs; every part embroidered separately and afterwards applied to the velvet in the midst of tendrils and light stems surrounded by spangles. If it is a cope, the embroiderer places below the cope hood an Annunciation, an Assumption, or a picture of Christ in Majesty. The effect of this decoration on red, blue, cardinal, violet, and black is excellent, but the embroidery of the figures does not bear examination, the technique being cheap and commercial.

Soon, with the Reformation, the religious wars, and the Revolution, the *opus Anglicum*, so justly esteemed during the XIIIth and XIVth centuries, disappeared completely.

May it, under the wise direction of another Mæcenas, be revived! In conclusion, this is my wish—a wish which is not only fancy, for in Holland and Belgium (notably at Bruges) artistic embroidery is again cultivated: witness the historical mitres and the ornaments, with figures executed as finely as miniatures, belonging to some of our French bishops. M. Grosse of Bruges has reproduced a superb orphrey of Florentine work (the original of which is in the Victoria and Albert Museum). What practical result can there be from special books on embroidery, exhibitions of needlework, special collections in museums and industrial schools of art, if in each country the embroiderers make no effort to take up the traditions and to follow the example of their predecessors? I hope that the English will neglect nothing under this head, and that soon I may applaud their success in the revival of their *opus Anglicum*.

L. DE FARCY.

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